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HOW OSTEOPATHIC LESIONS AFFECT EYE TISSUES.

Demonstration Before the A. O. A., at Put-in-Bay, by LOUISA BURNS, M.S., D.O., The Pacific College of Osteopathy, Los Angeles, Cal

In dealing with this subject, I shall consider the first word of the title by both the meanings which it might have in this connection — first, the manner in which the effects upon the eye tissues are produced, and, second, the nature of the effects produced.

The sympathetic connections of the eye are rather complex. I shall therefore take the liberty of calling your attention first to the anatomy of the simpler visceral reflexes and the manner in which the bony or muscular lesion may affect visceral tissues.

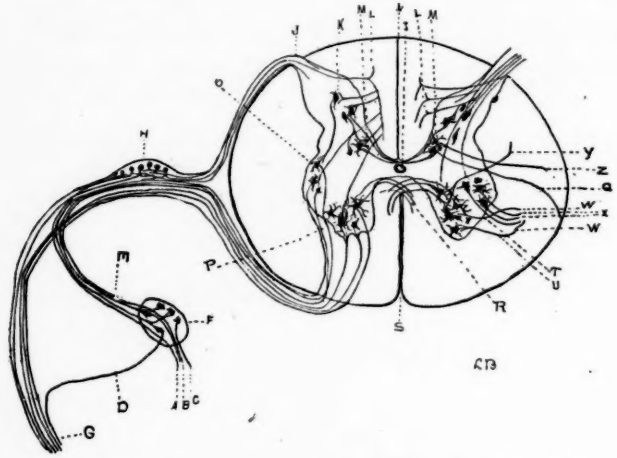
You are, I believe, supplied with two cuts illustrating somewhat crudely the structural basis of reflex actions. Please consider with me the one showing the large transverse section of the cord. The outlines of the cord and of the gray matter in it, and of the sensory and sympathetic ganglia, are drawn to scale. The size of the nerve cells is magnified, and their arrangement is diagrammatic. It would, as you know, be impossible to secure in a single slide all of these relationships. I have, however, slides showing all of the relationships illustrated, with the exception of the connections of the rubro-spinal tract. These are taken from Barker.

The fiber "A" is viscero-sensory. The body of the cell is in the sensory ganglion "H." The peripheral prolongation, properly called a dendrite, is medullated. It passes through the sympathetic ganglion "F," without making any physiological connection with the sympathetic neurons, so far as known, and is distributed with the sympathetic nerves. These fibers retain their medullary sheaths until they reach the neighborhood of their termination in the viscera. "B" is a viscero-motor fiber, the axon of a cell in the lateral horn "O" of the spinal cord. These fibers form the greater part of the white rami communicantes, and they usually pass through one or more ganglia before forming a synapsis with sympathetic neurons. These fibers are medullated until they reach the ganglion of their termination. "C" is a viscero-motor fiber, the axon of a cell in the sympathetic ganglion "F." These fibers are not medullated, usually, and the medullary sheath is extremely thin in the very few instances where it is found at all. Impulses carried over these fibers are derived from the lateral horn.

The lateral horn of the spinal cord "O" should be considered as part of the autonomic nervous system, of which the sympathetic nerves also are a part. The nerve cells of the lateral horn of the cord are smaller than those of the anterior

horn, and the axons of these cells are finer. The axons terminate by forming synapses with sympathetic neurons. The cells of the lateral horn of the cord receive impulses from several sources — from cells in the posterior horn "K," from cells of the spinal ganglion "H," by collaterals from their axons "L," from the red nucleus by way of the rubro-spinal tract "X," from the vasomotor and other centers in the medulla, and perhaps from other sources. Impulses are carried to the lateral horn only from sensory nerves and from centers which coordinate sensory impulses.

Probably all the sensory nerves entering the cord send collaterals to the lateral horn of the same spinal segment. Normally, the sensory impulses carried to the cells of the lateral horn are just sufficient to initiate the viscero-motor impulses



A—viscero-sensory, medullated.
B—viscero-motor, preganglionic, medullated,, passing to other sympathetic ganglia.
C—viscero-motor, postganglionic, non-medullated.
D—gray ramus.
E—white ramus.
F—sympathetic ganglion.
G—mixed nerve, containing sensory, motor and vaso-motor fibers.
H—sensory ganglion.
I—central canal.
J—posterior nerve root.
K—cell of posterior horn.
L—bifurcation of axon of sensory cell.
M—cells of Clarke's column.
N—posterior median septum.
O—cells of lateral horn, viscero-motor.
P—axons of cells of lateral horn.
Q—axon of cell of Clarke's column, passing to Gower's tract.
R—anterior commissure.
S—anterior median fissure.
T—anterior horn, motor.
U, W—axons of rubro-spinal tract to cells of anterior horn.
X—axons of rubro-spinal tract to cells of lateral horn.
Y—axon of pyramidal tract to cells of anterior horn.
Z—axon from cell in Clarke's column, passing to direct cerebellar tract.

necessary to the normal action of the visceral and vascular muscles and the glands of the body. If these impulses are deficient — as, for example, if the threshold values of the neurons concerned should be abnormally high — the outgoing impulses are deficient. Any abnormal stimulation of the sensory nerves initiates abnormal stimulation of the cells in the lateral horn, and through these, of the sympathetic nerves. This abnormal stimulation may be received through viscero-sensory nerves as is the case in the presence of indigestible food, etc., or it may be derived from abnormally contracted muscles, from joint structures held in abnormal tension, as in subluxations, or, rarely, from the skin itself.

Since collaterals from the sensory axons pass also to cells of the anterior horn,

abnormal viscero-sensory impulses may initiate the abnormal contraction of the spinal muscles. This tension may in time bring about mal-position of the vertebrae. Both the muscular tension and the mal-position may in turn initiate abnormal sensory impulses which stimulate the cells of the lateral horn in an abnormal manner. This reflex muscular tension and the exaggeration of the viscero-motor impulses thus produced are of great value to the body under slightly abnormal condition, but are a source of great misery if the visceral abnormality be continued. The effects produced from this long-continued muscular tension are probably not to be distinguished from those resulting from accidental structural mal-adjustments of long standing. The fact that abnormal stimulation of viscero-sensory nerves results in the contraction of spinal muscles is so frequently and painfully demonstrated that it is scarcely needful to discuss it here.

The converse, that the abnormal stimulation of somato-sensory nerves leads to the abnormal activity of viscero-motor nerves is not so easily demonstrated by clinical evidence, inasmuch as the action of non-striated muscles is not easily visible. A series of experiments performed in the laboratory of physiology in the Pacific College during the past three years demonstrates the following facts: Mechanical stimulation of the deeper spinal tissues increases peristalsis and vaso-constriction in the area innervated from the same and neighboring spinal segments. This condition is similar to that produced by the irritative lesion. Deep, steady pressure along the spine lessens peristalsis and vaso-constriction in the area innervated from the same and neighboring spinal segments. The condition is similar to that produced by inhibitory lesions.

In some of these experiments transient bony lesions were artificially produced. The vertebræ were rotated to the extreme extent and firmly held with the fingers. After a few minutes great vaso-dilation was noticed, the visceral walls were relaxed and distended, and peristalsis was lessened and apparently stopped. These effects slowly disappeared after the removal of the abnormal tension.

When the spinal cord is destroyed, or when the sympathetic ganglia are separated from the cord, viscero-sensory impulses do not give rise to any perceptible viscero-motor or somato-motor effects whatever. These experiments were performed upon some dozens of anesthetized animals. The abdomens were opened, and the effects produced directly observed.

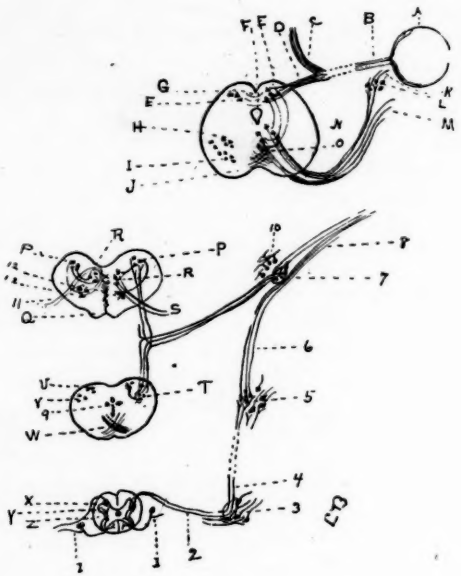
The lateral horn receives impulses also from centers in the medulla and mid-brain. The red nucleus and the axons of the rubro-spinal tract are of especial interest, because there is some clinical evidence in favor of the view that these are concerned in the co-ordination of the viscero-motor and somato-motor effects of emotional states. The impulses received by the cells of the lateral horn from both the medulla and mid-brain are of course ultimately derived from sensory impulses.

The paths of the reflexes concerned in the control of the visceral muscles of the eye are more complex, though the principles involved are the same. I ask your attention to the second of the cuts with which you are provided.

The upper section is taken through the anterior quadrigeminates, the aqueduct of Sylvius, and the crura cerebri. As in the other cut, the outlines were drawn to scale and the nerve cells and fibers diagramatically placed according to the knowledge derived from the study of some hundreds of slides, as well as of case reports and experiments.

I ask your attention first to the third cranial nerve and its connections. The

various nuclei whose axons make up the third cranial nerve have been classified and named after as many fashions as there have been men to investigate them. For our present purpose we may classify them physiologically, and recognize two nuclei, or rather, groups of nuclei, whose axons make up this nerve. We have, then, a lateral, or viscero-motor group "N," and a central or somato-motor group



A—retina.
B—optic nerve (decussation not shown).
C—about four-fifths of the optic tract passes to the lateral geniculate body and the pulvinar of the thalamus—these fibers are concerned in conscious vision.
D—about one-fifth of the optic tract enters the superior quadrigeminate body by the superior brachium—these fibers are concerned in the eye reflexes.
E—cells of superior quadrigeminate body.
F—aqueduct of Sylvius.
G—commissural fibers.
H—red nucleus.
I—substantia nigra.
J—position of the pyramidal tract.
K—short ciliary nerves, post-ganglionic, non-medullated.
L—ciliary ganglion.
M—third nerve, motor oculi.
N—lateral motor oculi nucleus, viscero-motor.
O—central motor oculi nucleus; motor to extrinsic eye muscles.
P—nucleus of insertion of fifth nerve.
Q—position of the pyramidal tract.
R—nucleus of the sixth nerve.
S—sixth nerve.
T—nucleus of insertion of fifth nerve.
U—nucleus gracilis.
V—nucleus cuneatus.
W—decussation of pyramids.
X—anterior horn.
Y—lateral horn.
Z—position of pyramidal tract.

1, 1—sensory ganglion cell.
2—axons of lateral horn cells, entering white ramus.
3—upper dorsal sympathetic ganglion.
4—viscero-motor, preganglionic fibers, medullated.
5—superior cervical ganglion.
6—viscero-motor, postganglionic fibers, non-medullated.
7—gasserian ganglion.
8—long ciliary nerves.
9—nucleus of twelfth nerve.
10—cells of Gasserian ganglion, supplying non-ophthalmic branches of fifth nerve.
11—facial nerve.
12—nucleus of facial nerve.

"O". The lateral nucleus is comparable to the lateral horns of the cord, the cell bodies are smaller, the axons are finer, and the dendrites are fewer and shorter than is the case with the cells of the central group or somato-motor group. The cells of the central nucleus are large and as rugged in outline as are those of the

anterior horn of the cord. The axons of the cells of the central nuclei pass without relay to the striated muscles innervated by the third nerve "M."

The axons of the cells which make up the lateral nucleus resemble the fibers of the white rami of the dorsal region. They end by forming a fine plexus of fibrils around the cells of the ciliary ganglion "L". The axons of these cells make up the short ciliary nerves "K", which innervate the ciliary muscle, the non-striated fibers of the levator palpebrae, and the sphincter of the iris. The path of the impulses concerned in the reflex action of the muscles just mentioned is usually as follows: Nerve elements of the retina "A", that portion of the optic nerves which enters the anterior quadrigeminates "D", the cells of the quadrigeminates "E," where the impulses are co-ordinated, then by axons of these cells to the lateral or viscero-motor nucleus of the third nerve "N", thence to the cells of the ciliary ganglion "L," and by the non-medullated fibers of these, the short ciliary nerves "K," to the non-striated muscles concerned.

The reflex action of the extrinsic eye muscles is produced in part by means of impulses carried by the same, or possibly a parallel path in the optic nerve to the quadrigeminates, thence by the association fibers to the central nucleus "O" of the third nerve, and by the medullated fibers of these, without relay, to the striated muscles. The connections of the fourth and sixth nerve are similar to these. Sensory impulses over the fifth may also influence the action of the central nucleus of the third. These nuclei also exchange association fibers with the nuclei of the fourth, sixth and seventh cranial nerves, and with the red nucleus and substantia nigra. Fibers from the Rolandic area carried in the central region of the crusta, carry impulses concerned in what we call volitional movements. These reflex arcs are not directly influenced by the bony lesions usually found, but the impulses carried over these nerves have an important bearing upon the effects produced by lesions near the cilio-spinal center.

The blood vessels of the eye, the dilator muscle of the pupil and the lachrymal glands receive impulses over another pathway. Just posterior to the motor oculi nuclei, beneath the upper portion of the floor of the fourth ventricle, is a group of nerve cells whose stimulation initiates dilation of the pupils. The axons of these cells pass downward to the pons, medulla and cervical cord to the cilio-spinal center. It is not known in what tract they are found, though they are probably near the rubro-spinal tract. It is known, however, that these axons form synapses with the nerve cells in the lateral horn of the cord in the cilio-spinal center "Y". The axons of the cells last mentioned pass out with the anterior nerve roots and from them enter the nearest sympathetic ganglion "3", as white rami communicantes, "2". They pass through the upper one or two thoracic, and the middle and inferior cervical ganglia without relay, still retaining the medullary sheaths. In the superior cervical ganglion "5" they break up into fine fibrils, which form a net work around the cells within the ganglion. The non-medullated axons of these cells "6", enter the cranium. Part of them take part in the formation of the carotid plexus. Others pass through, or near, the Gasserian ganglion and are distributed with the fifth nerve. The long ciliary nerves are made up in this way.

The nerve cells normally concerned in the dilation of the pupil, the secretion of tears, and the contraction of the blood vessels of the eye, are,—first, either by way of the retina, the one-fifth division of the optic nerves and the anterior quadrigeminates to the pupilo-dilator and the vaso-motor center, or, by way of the fifth nerve, the Gasserian ganglion, the nucleus of the fifth and the fillet, to the anterior quadrigeminates the pupilo-dilator and the vaso-motor centers. From these, the im-

pulses are carried to the lateral horn between the seventh cervical and the third dorsal segments of the cord, and thence by the white rami and cervical sympathetic cord to the superior cervical ganglion. Normally, the pupilo-dilator center is affected chiefly, if not entirely, by impulses from the optic nerves. Abnormally, any excessive stimulation of sensory nerves, or any excessive emotion, may initiate pupilo-dilation. The ophthalmic vaso-motors act in accordance with the algebraic sum of the impulses reaching them from all sensory nerves, but chiefly from the ophthalmic division of the fifth, while the subsidiary centers act in obedience to the higher centers.

The centers in the medulla and the pons are intimately related by means of association fibers, hence they are easily affected by abnormal or unusual impulses reaching all sensory nuclei of insertion. It is by means of this relationship that the eye is enabled to respond to changes in other parts of the body with such remarkable celerity.

The part of the pathway most easily affected by bony lesions are the cells of the cilio-spinal center and the superior cervical ganglion. I ask your attention again to the large section of the cord. The entering sensory axons "L" send collaterals to the lateral horns of the cord. If there be any abnormal irritation of the sensory fibers of the segments between the seventh cervical and the third dorsal nerves, then abnormal impulses must be carried to the lateral horn and must affect the nerve impulses to the eyes. Any mal-adjustment of joint surfaces is a source of very marked irritation, as is also abnormal muscular tension. Irritation of the skin of the back of the neck may produce marked pupilo-dilation.

A rough, stiff collar or collar button are not to be called osteopathic lesions certainly, but they do produce decided effects upon the circulation in the eyes and the size of the pupils in some cases. It is not necessary to offer clinic reports of cases of eye troubles in which recovery has followed the correction of an upper dorsal lesion to an audience of experienced osteopaths. Probably there is not a member of this Association whose case book does not show a number of such reports. We all recognize as well, of course, the existence of structural deficiencies whose most rational, if not whose only, remedy is the use of corrective lenses.

The position of the superior cervical ganglion renders it especially liable to direct abnormal impulses. The abnormal contraction of any of the anterior cervical muscles, brings tension upon the connective tissues, lessens the space, crowding the pulsating carotid artery into injurious propinquity with the ganglion, and interfering in other ways with nutrition and drainage. I am disposed to the view that effects produced upon the eyes by lesions of the upper cervical vertebrae are due to the mechanical and direct irritation of the superior cervical ganglion by structures influenced by the upper cervical nerves. I am not fully persuaded upon this point, and will be very glad to hear the opinions of others.

I now ask your attention to the nature of the effects produced upon eye tissues by these abnormal nerve impulses. As has already been stated, the bony lesions most frequently found in connection with eye disorders are those which affect either the cilio-spinal center, or the superior cervical ganglion. The first effect produced upon the blood vessels of the eye by the unusual stimulation of these centers is that of constriction. Within a very short time, possibly as a result of fatigue of the neurons, the blood vessels become dilated, and this condition is persistent.

The ultimate pathology of the eye which has been kept hyperemic by these

conditions depends in a large part upon the environment of the individual, and especially upon the presence or absence of pathogenic bacteria.

Any of the pyogenic bacteria, or the Week's bacillus of acute conjunctivitis, or the bacteria characteristic of any of the contagious diseases may gain entrance to the eye while it is in this abnormal condition and produce the symptoms characteristic of their activities elsewhere. The invasion of the gonococcus produces blennorrheal ophthalmia, with all its terrible effects. Occasionally the presence of irritative pollen in the air precipitates an attack of so-called "spring catarrh" of the eyes, a condition resembling hay fever.

The effect produced upon the pupilo-dilator muscle is usually persistent. The pupils are constantly abnormally dilated, unless the sphincter is contracted strongly enough to overcome the dilator. That is, the dilated pupil admits an excess of light, the impulses thus generated are carried to the anterior quadrigeminates, and thence to the viscero-motor nucleus of the third nerve, thence to the ciliary ganglion and the sphincter. The symptoms of nerve strain thus produced are not to be distinguished from those resulting from astigmatism or hypermetropia except by the ophthalmological examination, and inasmuch as nearly all eyes are astigmatic in some degree, there is an opportunity for some nice work in diagnosis.

If the threshold value of the neurons composing the reflex arc governing the sphincter of the iris should be abnormally high, because of fatigue, mal-nutrition or toxemia, the pupilo-dilator effect is not overcome. The pupils react poorly to light and distance. The peripheral rays are not cut out, hence the spherical aberration is not overcome. In the effort to secure a better focus the ciliary muscle is greatly contracted, at times irregularly, thus leading to a temporary astigmatism, which may become permanent. Such patients usually squint or suffer other facial contortions, either as a result of the endeavor to secure better vision, or as the result of contractions of the facial muscles produced by the abnormal nerve impulses reflexly initiated.

At the same time the admission of an excess of light irritates the retinal tissues. Hyperemia results from this also, and this may lead to all the ills of retinal congestion.

The abnormal stimulation of the cilio-spinal center or the sympathetic ganglia induces changed secretions of the various glands of the orbit. The tears are somewhat reduced in quantity, but may become slightly viscid.

It is not known whether this is the effect of the changed blood pressure or of the irritation of the secretory nerves. The tear ducts may be occluded because of the viscidity of the tears, or by the hyperemia and infiltration of the mucous and sub-mucous tissues. The structural changes brought about are merely those following hyperemia and congestion in any part of the body.

Osteopathic lesions in almost any part of the body may produce changes in the functions of the eye tissues. For example: A lesion affecting the renal splanchnics may be responsible for the faulty action of the supra-renal capsules, and blood pressure be raised or lowered in the eye as elsewhere. A lesion affecting the kidneys may result in the blindness of uremia. The list of similar conditions might be almost indefinitely continued. In many of these it sometimes happens that the eye symptoms are the most prominent and that the physician is consulted on that account. In such cases, again, are found opportunities for exhaustive work in diagnosis.

I have endeavored to deal with the physiological rather than the clinical aspects

of this subject because I rather thought the physiological aspect was the one expected of me, and also because my practice has been too limited for me to have anything of value to give in that line. The little experience which I have had, however, has proved to me that many of the cases of nerve strain apparently of ocular origin, and many of the infectious conditions of the eye tissues may be referred either directly or indirectly to bony or muscular lesions in the cervical and upper dorsal regions.

DISCUSSION.

Guy E. Loudon: I believe I am not making an exaggerated statement when I say that this address of Dr. Burns has paid me for making my trip from Vermont. I am proud of her, and I think the entire profession ought to be proud of her. Her demonstration is along the line of research work, such as we have been advocating at this meeting. Anyone that will stand up here and entertain us as she has deserves much praise. I am sure we will profit by her talk, and I hope it will be published in full in the JOURNAL, so that we may study it, and I feel certain we will take up the work of treating the eye with more confidence and get better results, and be able to explain it to our patients in a satisfactory manner. I think every one ought to consider it an honor to have a place on our program, and those of us who are assigned subjects or clinics ought to so prepare ourselves by bringing something of special interest that we may leave with the Association valuable hints and suggestions. In making these remarks I am not criticising anybody, but rather encouraging all the speakers; for this has been an excellent program, and I am sure we will all profit by the example set by our sister, Dr. Burns, and I move that the Association tender a vote of thanks for her demonstration.

Motion seconded and unanimously carried.

J. F. McNary: I rise to voice the sentiment of this Association and that of Dr. Loudon in this appreciative manner toward Dr. Burns, and while I am up I wish to ask the Doctor to describe or express her experience in cases of glaucoma. After what she has said relative to the ciliary body and its co-ordination with the upper cervical ganglion and its relation with the canal of Schlemm, as I understand that is the cause of that dreaded disease, and if she will say a few words which we can carry with us to our homes, she will not only confer a favor upon us, but a lasting benefit to the suffering patient.

Dr. Burns: I have never treated a case of glaucoma.

Ellen B. Ligon: In my experience I have found that in cases of degeneration of the optic nerve the trouble seemed to be relieved by treatment at the second dorsal. That seems to be the nutritional center controlling the blood supply. I had been treating a patient for several months before I devoted any special work to the second dorsal, and I had no results until I turned my attention to the second dorsal, which was lateral to the right as the result of a football game. The patient was pronounced incurable by Dr. Milner and he was tending toward blindness. The treatment at the second dorsal relieved the condition, and the patient is today one of our osteopathic practitioners.

I have found that where there was an irritation and pain in the eye which seemed to result from an irritation of the ciliary nerves and muscles, the result was pain in the cervical region and occiput; and in that connection I found it necessary to treat the hyoid muscles. The hyoid bone was drawn up and back and rotated the center to the extent of not my being able to relieve it by the treatment of the cervical vertebrae alone, and I had to go as far as the suprascapular notch

where the omohyoid muscle finds its attachment. I find in the degeneration of the optic nerve I have given relief by going to the second dorsal.

The only patient I ever had where I found any evidence of the medical profession using,their knowledge of this as the ciliary center was this case. I found the patient severely scarred and I asked the cause. She said she had a severe eye trouble and the physician put in a seton at that place, and she could not help noticing the humane treatment of osteopathy as compared with other methods with exceeding greater results.

R. W. Bowling: Any one who has been keeping up with medical literature for the past ten years will have noted the decided influence osteopathy has exerted over the thought of our brethren in the other therapies. Recently an article in the New York Medical Journal attracted my attention as being corroborative of a remark I recently heard made by Dr. Teall, that we osteopaths were about to be discovered by the medical profession. This article bore the signature of one of the world's famous orthopedic surgeons, in which he reported a number of cases of refractive errors accompanied by abnormal spines, especially scoliosis, and arrived at the conclusion that the corrective measures adopted by oculists were responsible for the cures which followed.

One case of especial interest was cited from the records of a famous specialist wherein astigmatism, accompanied by scoliosis had been cured by a combined treatment corrective both to the eye and to the abnormal spine. The conclusion was, as in other cases, that the correction of the error in refraction was responsible for the cure. However, he stated that many physicians had objected to this theory, holding that the cart was before the horse—and we as osteopaths certainly recognize the truth of this sage observation.

This article makes a further statement that 27 per cent. of all school children in the United States and Europe are afflicted with more or less ocular disturbance, and it is assumed that the abbnormal posture taken by these children during school hours is responsible for the errors in refraction because of the children's effort to place the vision in correct relation with the abnormal posture, resulting in astigmatism and other defects, which in turn result in scoliosis and other abnormalities of the spinal column.

Certainly as osteopaths we are convinced that the cart is before the horse. I should like to cite one case falling under my notice recently. A very vigorous, muscular child was, because of his extreme vivacity, handled rather too roughly, and in consequence when the child began to walk there was a marked kyyphosis at the cervico-dorsal junction. This child later developed a decided hyperemia of the conjunctivæ, also an increase of adenoid tissue in the throat. Being taken to the oculist they, as usual, declared the eyes sound except for the influence exerted upon them from the adenoids, and suggested removal of the same. I think we are all familiar with numerous instances of such operations being fruitless, and I am sure that were these gentlemen osteopaths they would seek for and invariabbly find some lesion affecting either the cervical or uppr dorsal region, and through these influencing deletriously the circulation both in the eyes and throat. Such abnormal circulation must inevitably result in increase of the adenoid tissues of the naso-pharynx and pharynx as well as an interference with the normal development of the eyes. And I have no doubt could this case have been followed it would have been one of those presenting errors in refraction, and by the gentleman before cited, these errors would have been causative of the kyphosis which you will note in this case antedated the other conditions mentioned.

F. A. Turfler: I have been thinking about the reason why the cilio spinal centers are between the shoulders, and I believe the reason is that nature has placed them there so that in the movements of the head the muscles pull across those nerves and those joints are moved, thereby dilating the pupil by the stimulation of those centers, in the same manner as though they had been stimulated by the hand. In moving the head forward, looking intently at any object the cilio spinal center is stimulated, the muscles pulling across the nerves, the pupils are dilated, thereby enabling you to see much better.

CANCER.

J. Martin Littlejohn, Ph.D., M.D., D.O., Chicago.

We introduce the discussion of the subject of cancer by the tabulation of a series of cases.* This is done so as to have before us in the later discussion of the subject the "Materies Morbi" which can be referred to as the discussion proceeds.

This subject has been under our observation for many years. Dr. Sawyer and myself, with another doctor, in the summer of 1903 made an extended tour, taking in the cancer hospitals and other general hospitals where cancer is treated, in Europe. We studied the literature of the subject with many who have devoted a life time to the subject. Our thanks are specially due to the imperial authorities in Berlin and the Department d'Assistance Publique in Paris that gave us permits to conduct our investigations, and also to the superintendent and laboratory assistants of the London cancer hospital.

The general opinion seemed to be that cancer was an incurable disease, except in those few isolated cases in which surgery seemed to offer palliative relief. Some have held that cases of cancer may be spontaneously cured. (Case of Frau Koenig spontaneous cure of carcinoma possible, Verh de Deutsch Gesellschaft fur Chirurg, 1899).

It is not our intention to follow out opinions, however, or theories, because while these are of historical value they are of no importance therapeutically in the discussion of our view, as it is radically different from every other view.

We have investigated the subject of the prevalence of cancer in certain localities both in England and America, to find out possible exciting conditions. These will be referred to incidentally as occasion arises.

The question is asked (1)—Is cancer curable? We answer this by asking another question, is the cause of cancer removable? If so, then, like any other disease, cancer is curable. Let us remember disease is not an entity but an effect produced in the organic system or its parts, whereby certain manifestations, antihistological and anti-physiological, appear that are not found in the normal patient. The cure of any disease implies—

(a) The removal of the cause producing the effect or effects; and

(b) Sufficient vitality and resisting force in the organism both to stand the removal of the cause and the recuperating of the vitiated system.

Many fail to take account of these latter conditions. Some of the cases cited illustrate this point. The most thorough upbuilding is an absolutely essential factor in the treatment of these cases, more especially as in cancer the whole systemic nutrition is vitiated. In treatment the X-Ray treatment now is preferred as a method of treating cancer, being "superior in effect to the surgical method, be-

*The table of cases referred to above will appear in a subsequent number.—Editor.

cause it preserves the affected organ and acts, not upon the local condition, but on general nutrition." (Mondain L'Art Medical, 1903). This means, without endorsing the method of treatment, that the general nutritive condition must be reached so as *to purify it, establish thorough trophic conditions and then replenish the system so as to repair the local conditions.*

(2). Are drugs used in the treatment of these cases? Never. One of the main points in the method of treatment is the elimination from the system of any drug formerly used by the patient that has cumulative action and left cumulative effects behind. *To rid the system of every vestige of poison, both active and passive, to overcome even the passive and latent effects of these poisons, and to correct the etiological causes* represents the keynote of our therapy. Even noxious and irritating elements of the food supply are very carefully eliminated, such as tea, coffee, alcohol in all forms, all lotions of every kind, pork, in many cases meat of every kind, tomatoes, etc. Diet on the basis of the proximate principles of the body is an essential condition.

These cases are tabulated from careful records kept by Dr. Sawyer and myself. There are several points deserving of note before entering on the general discussion of the subject.

(1). The structural disturbances of tissues involving the nerves, blood vessels and lymph supply to the seat of the localized affection are prominent. Rib lesions in the breast conditions, dorsal and lumbo-sacral lesions in the pelvic conditions, produce the stasis of blood, the obstruction of drainage, the irritating of the nerve supply, resulting in atrophic or non-trophic changes. In such conditions the readjustment of the structural variations is the fundamental rational treatment.

(2). A localized seat or nidus becomes the center of—

(a) Toxic accumulation;

(b) An artificial toxic nutrition, and—

(c) Organized perverted tissue development.

The causes of this localized condition, I consider, judging from the cases, are:

(a) lesions that so weaken a part as to make it a dumping ground for the refuse of the body and of the waste from a lifetime of indiscretions in diet, manner of life, modes of dress, previous diseases, effects of vaccination, etc.

(b) Traumatism associated with direct injuries, surgical operations in benign conditions, abscesses, boils, lacerations and such like, the result of which is the separation and dissociation of the structural units, the cells, to such an extent that deposit, perverted nutrition and similar changes follow.

(c) The abuse of certain organs, or functional activities reacts upon the nervous system so as to weaken the nerve force and the trophic relations of the nervous systems, so that by the lack of nerve force, the cutting off of the nerve control and the absence of trophicity, the same conditions of separation and dissociation of cell structures follow.

In any of these cases the lesions may be in the tissue structures, like bone, muscle, ligament, or in the minute structure of the nerve cells, or in the dendritic connections of the nerve units.

(3). In explanation of the variety of lesions, and frequently very different lesions noted in the tabulated cases, I attribute the variations to—

(a) The fact that certain lesions may be primary, that is, actually etiological.

(b) Certain lesions may be, and undoubtedly are secondary, as in the case of (b) and (c) noted under (2), the *reaction* from the change produced by traumatism, laceration, etc., being in the direction of the malignant growth. In these cases

we have a *secondary* etiological lesion, that is a *maintaining* or sustaining lesion. In many of these cases there is undoubtedly another primary lesion corresponding with the primary cause of the *dissociation* of cell structure. Here another lesion is found. These different lesions are brought out in connection with the treatment of the cases.

(c) Frequently we find compensatory lesions. The system is normally self-sufficient and within the limits of immunity, that is, vital resistance, other parts of the system come to the rescue of the weakened parts. In this case some strong parts of the system become depleted, weakened or irritated in the effort to help the weak. Here another structural lesion arises.

My experience in the correction of these lesions is, that in so far as we can make out a history of the development of the conditions, correction should be made of the most recently developed lesions, called the secondary, where a variety of lesions is found in the same case, so as to throw the system back into as nearly as possible the condition of relative normality, in which it was when the primary lesion existed alone. In this condition the entire force of the system is at command when we set ourselves to the correction of the primary lesion. The same principle is followed in the *antidotal* treatment, except that, if in a given case predominant symptoms of poisoning prevail and these predominate over all other symptomatic conditions, this toxic condition must first be removed and then the others are attacked in the reverse order of their development.

(4). Toxic conditions in the localized area. This represents a perverted metabolism and the accumulation of toxic by-products. This is in line with the circulatory and trophic conditions of perverted assimilation. If the blood stream is poisoned and if the nerve centers are poisoned, the nutritive and trophic supplies are vitiated and the sub-katabolism of the nervous system represents the throwing out of thoroughly vitiated products for assimilation, together with the poisonous accumulation either in the chemical or dynamic form. In the dissection of a negro cadaver that had died of syphilis in which the tibial nodes were present, we noticed the presence of large proportions of mercurial crystals along the tibia between the bone and the periosteum. This condition must be dealt with by antidotal treatment, to remove, liberate or break up thes combinations that result in and produce the vitiated growth. The vitiated growth is not the disease, nor properly the seat of the disease, but represents an attempted excretion from the centers of vitality. When the excretion reaches a certain stage or is of a certain type, then the new growth becomes organized and acts positively in the process of life destruction by drawing from the body the nutrition and vitiating all the nutrition of the rest of the body.

(5). The symptoms which are pathognomonic are those of intoxication. The cachexia, dirty yellow discolorization, dirty yellow spots, minute cystic blood accumulation and deposit in the skin and surface fascia, general wasting away, failure to assimilate, resulting in emaciation, loss of appetite, dropsy, gas formation —these are all symptoms that represent a continued attempted excretory process of elimination from the vital centers on the surface of the skin or into the eliminative fields of glands, fascia, the blood, lymph and tissue channels that render nutrition and continued life impossible. These must not be stopped, as is so frequently done in the symptomatic treatment of such patients, because it drives the real disease deeper and makes cure impossible. Hence the only way to control these is to eliminate the poisons and to restore all the eliminative processes to normal. This means that circulatory conditions must be raised to par, vaso motor

control must be established and the nervous system regenerated before the skin and surface tissues, internal and external, can be purified. The blood must be cleansed and the normal balance between blood, lymph and cerebro-spinal fluid re-established. Ephithelial and glandular elimination must be restored.

(6). One point we have noted particularly in the development of malignant growths, particularly in the early stages, is the unbalance between the nerve fluid, the blood and the lymph. In one case that we studied for some years by the examination of the fluids, we found leucocythemia very marked, with no disturbance of the red blood corpuscles. Later we found the red blood corpuscles modified with the tendency to the development of the giant nucleated red blood cells and very marked predominance of the plaques or plates. These responded to acid reaction only, indicating the gradual degenerative changes in the fluids as the vitiation of nutrition progressed. Other blood changes will be noted under the pathology.

II.

What is cancer? Next to the great white plague, tuberculosis, comes cancer. In regard to the origin of these much speculation has been expended, so far it seems without any satisfactory solution. As the subject is so very complicated we shall try and discuss it from various standpoints, so as to get at the etiology, symptomatology, pathology and treatment of the conditions.

I use the term cancer in the broad sense to include all growths that tend to progress by insidious diffusion; starting in a localized nidus of some kind, back of which lies the true etiology, growth takes place around, in and towards this center, so that a concentrated new formation of a vitiated and destructive type results, with vitiated metabolic processes and resultant vitiated assimilation products.

In Chicago cancer has shown an increased mortality from .11 per cent. of total mortality in 1851 to over 4 per cent. within the last few years. It is interesting to note that the total mortality from cancer has doubled since *La Grippe* first visited Chicago. Why? Because of the lowered vitality and general systemic weakening produced by grippe. By this I mean lowered vital resistance in the nerve cell life which makes it impossible to keep up systemic nutrition and strength. The chief external causative factor is the indoor life, that produces:

(1) A lowered vitality on account of lack of the proper supply of oxygen, rendering the system more susceptible from imperfect oxidation, imperfect preparation of the food protoplasm, and much waste;

(2) A slow chemic poisoning associated with the cumulative action of carbonic acid, other gases and poisons;

(3) Irritation due to toxins not eliminated from the system, on account of lack of proper excretory action.

The most of the year is spent in overcrowded apartments, steam heated flats, offices, stores, factories, clubs and schools, where the daily oxygen supply is not sufficient to carry on the vital processes necessary for health. To this must be added lack of sufficient water to enable the kidneys and other excretories to carry off waste matters, the use of too hard water, especially where there is an excess of lime, the lack of physical exercise, tending to impaired respiration and perspiration. That we are not exaggerating the necessity of oxidation is proved by physiology, animal oxidation depending on the special constitution of the protoplasmic proteids (Pfluger), the oxidation in the ultimate analysis depending on the nuclear matter of the cell (R. S. Lillie).

Braithwait attributes cancer to four conditions, the most important being the

excessive use of inorganic salt. This condition does not operate, however, unless one or more of the other conditions exist, viz: excessive nutrition following the use of too much food, especially meat, impurity of the blood from insufficient exercise, especially in old people who eat too much and do not exercise, and some local irritant, such as nicotine, tobacco smoke, micro-organic burrowing, over-stimulation of the mammary glands by ovarian or uterine reflex conditions. Braithwait and Turnstall, physicians to the hospital for incurable Jews, claim that among the Jewish women cancer is unknown. The hog is the only domestic animal which has not cancer. The savages are said to be free from cancer. Hogs and wild animals that get no artificial salt are said to be free from cancer. This disregards the fact, however, that wild deer will risk their lives to get salt while in the domesticated condition the deer get salt freely and develop cancer. Extensive cancer fields are found where salt pork is very freely used.

In line with this we find the theory formulated that salt is a preventative of cancer. Two facts Braithwait brings out of some value,

(1) The relation of salt to cancer, and

(2) That the excessive use of meats, especially in sedentary people, in fact, the excessive use of any kind of food which the system does not call for, is a foundation for cancer. Both of these facts are in line with our theory of exciting conditions.

In an article in Harper's Weekly (March 3, 1906,) Dr. C. W. Saleeby, an experimenter in the field of the origin of life, discusses the so-called specific cure of cancer by the use of trypsin, discovered by Dr. John Beard, of Edinburgh University. (See McClure's Magazine, August, 1906, British Lancet, February 4, 1905, p. 281, and American Medical Association Journal, March 10, 1906, p. 128; December 15, 1906, pp. 2003 seq.) Dr. Saleeby says, "It seems more than probable that in trypsin has been discovered for the cancer cell that specific poison which must exist for every cell. Only the philosophic few could have guessed for a moment that Dr. Beard's long and famous researches would ever enable him, as they would, indeed, appear to have enabled him to place in the hands of the physician a veritable cure for cancer." Drs. Beard and Shaw McKenzie conclude as the result of several thousand experiments that "trypsin is the substance which will destroy the cancer cell with ease and without danger to the individual."

This trypsin is "the characteristic ferment of the pancreatic juice, a remarkable but familiar substance." The microscopic examination of the tumor indicated, after injection of the trypsin, that every one of its cells had degenerated. On this basis they conclude that a cancer is a product of what "Weissmann has taught us to know as a germ cell." These germ cells are not produced by the embryo but are independent of embryonic growth. "Germ cells do not confine themselves to their own proper organs but many of them are apt to wander all over the body."

What are these wandering cells? They originate, I believe, in the bioplasts, that naked living matter which in the nuclear field represents the field of oxidized matter, forming the active (living) proteids. These living proteids are the primary substance that occurs in every developing cell, absolutely essential for cell life and growth. The white blood cells, or primary cells, take up this primary substance and hand it over to the blood to furnish the tissue cells with directly vitalized nutritive substance. In the normal tissue this substance increases the tissue cell life, antagonizes disease conditions, builds up the cells, overcomes fatigue and exhaustion and regulates the rhythmic action of muscle. When this substance degenerates certain of the white blood cells degenerate and we have mi-

gratory cells in the circulation that may lodge anywhere, where the vital resistance is lowered. Here we have the theory of a cancer cell capable of migration and transplantation. These cells are not embryonic but are the primary corpuscles of the regenerative and repair processes of the body, which represents practically a perpetual embryonic process. In the infectious diseases practically the same is true of the origin of the so-called germs. That is, they do not come from without, except in cases of propagation from one body to another, when we have practically the process of transplantation; they come from within and represent the black sheep generated by destructive processes of the primary substance, the bioplast of the nuclear field, and the degeneration of the white blood cells from the presence and action of this degenerated primary substance.

No one will deny that cancer represents a new growth, and if this pancreatic ferment is the active destroyer of the substance of that new growth, nature has provided a normal internal secretion whose function it is to be always on the watch to prevent the development of the cancerous growth.

What is, then, what we call cancer? Cancer represents a malignant growth involving the change of structure of an organ or tissue, in the dissociation or separation of the normal histological cell structure, involving as it is claimed in pathology a return to the simple continually recurring embryonal state of regenerating structure. This simply means that regeneration is a typical generation.

This, however, is not a wide enough definition of cancer. Cancer represents a general condition of the system or of the underlying units of primary substance, white blood cells and tissue corpuscles, before the particular localized condition develops. This general condition involves the failure of the trophic and nutritive conditions, primarily implying an abiotrophic condition (Gower's term used in another connection in his work on "Diseases of the Nervous System") of exhaustion of the ganglionic system or positive poisoning. This prevents the proper supply of the normal nerve force and trophic materials, i. e., gangliaesthesia, that is the disturbance, irritation or anæsthesia of the ganglionic nerve system, resulting in turn in neurosis which we generally recognize in most diseases as the starting point of localized disturbances in nutrition, secretion or excretion. The result is that the structural parts of the tissue involved grow at the expense of the inter-structural, on the analogy of the spider cell growth of connective tissue elements at the expense of the nerve cells. Hyperaemia, hypertrophy, proliferation of cells, deposit of materials, naturally and necessarily follow in the physiology of the pathological condition.

Cancer may be classified as a constitutional disease involving the most fundamental units of the vitalized organism. A good constitution has the power of resisting and throwing off all destructive conditions. The animal body as such can neither produce new matter nor new force. All the chemical processes take place within the cells. It is very difficult to isolate the developing cell. Attempted isolation results in the formation of new substances that either alter or destroy the physiological constituents of the cell. This process is so delicate that excessive temperature in the cells will so alter the solvent substance that keeps uric acid in solution, that it becomes a xanthin product, which will analyze into uric acid. Now if the leucocytes are imperfectly developed, as some are all the time in continual development, these leucocytes become acidified and tend to degeneration. In this condition normal nutrition of the tissue cells is impossible. If we add to this the fact that is always present in chronic diseases, viz: the

presence of poisons or poisonous force, from auto-intoxication or the active use of poisons, then we can see how cancer represents a chronic constitutional condition.

Dr. Burnet, of London, in speaking of the fact that large numbers of cancer cases come from the Eastern counties of England, where people go to get cured of consumption, says, "It is because the consumption poisoning is not taken out of the blood; it is lived down, but not out, by means of the clear air; and when the vitality begins to wane it reappears as cancer." Here we have the cumulative poison idea recognized as the basic factor in cancer. This is true of other diseases.

Dr. Mary Hall Williams, of Penzance, England, describes a case of a cancerous growth on a mucous membrane which developed on its original field but later developed into a cancerous growth of the left breast. In this case she claims that rheumatism lay at the bottom of the cancerous growth and represented the obstruction in the form of poison that nature has to meet in the attempt to make perfectly healthy tissue. When we find a large proportion of cases in the region of the purest air, so pure indeed that the young can live down tuberculosis in it, it is evident that there must be a deep seated poisoning of the system.

Cancer is a comparatively modern disease, said by some to be a disease of civilization. Its chief characteristic seems to be hyperplasia of no specific type, there being a very rapid proliferation of epithelial tissue. The malignant growth itself is at first purely local and benign in character, "carcinoma originating from cells which belong to the epiblastic or hypoblastic structures, epithelial, while sarcomas are from the mesoblastic connective tissues." Hence cancer is characterized locally by the rapid proliferation of cells. It takes 21 years to make an adult human body and if the nervous system is completed, 35 years, yet from 6 months to 6 years can unmake it completely by a cancerous development.

Cancer is not a microbic disease. The germs or toxin basis of cancer may be present in every one in potential form, in certain cells which when degenerated, under the influence of destructive metabolism become malignant and in their malignant form proliferate very rapidly.

Our view of cancer, therefore, without formulating a theory, may be summarized at present, explanation and development coming later:

(1) A nervous condition representing trophic nerve disturbance, involving the most fundamental neural bioplasm and the protoplasmic processes; resulting from this we find a condition;

(2) Affecting the lymph system through the communication of vitiated trophic materials in the cerebro-spinal fluid to the lymphatic fluid and the lymph glands. This in turn;

(3) Affects the blood through the lymph, an effect that shows itself in the minute blood cysts on the surface of the skin and in the constitution of the blood, especially the red and white corpuscles and the plates;

(4) The vitiated condition of these vital fluids causes localization of conditions in connection with some exciting condition such as traumatism, lesion, dissociation of cell structure by abscess, etc.;

(a) By weakening the physiological activity of certain organs or tissue structures;

(b) By paralyzing the nerve force to these organs or structures;

(c) By poisoning the metabolic materials so that the nidus becomes a center for the accumulation of waste materials from the general metabolism of the body.

(5) The neoplasm is the accumulation of sub-katabolized substances, the pro-

duct of systemic sub-katabolism localized at some point where the sub-katabolism is at its maximum on account of a lesion or traumatism. This sub-katabolism represents a metabolic state in which effete cells which have fully performed their functions are not broken up and eliminated as other waste matter, but remain in a static condition until they are sub-katabolized into, and form a degenerative tissue structure.

The immediate causes of this degenerative sub-katabolism are:

(a) Deficiency of oxygen to produce perfect normal oxidation;

(b) Excess of acidity of tissue, thus preventing the normal metabolism of tissue elements in an alkaline medium;

(c) Deficiency of heat, found principally in old age where the heat units are less than normal, as found in adulthood.

(6) The result is an accumulation of useless waste and toxic elements which the system is unable to metabolize and eliminate. The localization of the neoplasm is associated with dormant devitalized cells, separation of vital cells preventing the normal structural adjustment of cells necessary to histological life. This induces static conditions of the accumulated waste. Here we have the field of *minute microscopic lesions* not in the morbid histology sense at least primarily, but *the disturbance of the physical relations of the structural elements.*

(7) The cause of this neoplastic accumulation, however, is a constitutional one, viz; the deficient supply of oxygen, deficient alkalinity of tissue and deficiency of heat (distribution), resulting in the sub-katabolic condition. The result is neurotic and necrotic processes among the tissues, degenerative conditions of the blood cells, acidity of the blood and a general intoxication of the vital fluids—all in the nutritive field.

(8) The field of mechanical irritation, obstruction or interference, that is, the field of lesions, may be (1) *primary,* any lesion which will produce or after a time from hyperfunctioning, will result in any of the conditions mentioned previously in the metabolic or nutritive fields or in both. Hence the frequency of lesions in the nutritive areas of the spine. (2) *Secondary,* any lesion that obstructs or interferes with the distribution of oxygen, alkaline supplies or heat, or any lesion associated with traumatic conditions, ulceration, abscess, etc., may cause localization of the dissociation of cell structure and toxic accumulation.

The essential point is that there is a constitutional nutritive disturbance. The body is homogeneous. No neoplasmic growth can exist without a disturbance of the entire organism. Hence we will find that in therapy the removal of the growth by knife, lotion or internal remedy has not cured the condition, but frequently aggravates it. Why? Because metastatic conditions result from such modes of treatment. Systemic sub-katabolism is the primary producing cause of the cancerous growth. That is, the cancer, like the tubercular condition, the pneumonic congestion and infiltration, the catarrhal accumulation, the anemic degeneracy, the leukoplastic stasis, the scrofulous gland infiltration represents an excretory product of the original diseased condition of the system. Hence degenerated materials, impurities and all waste elements are unevacuated.

(9) One important point to be noted is that the sub-katabolism may be actually developed by the use or the presence of poisons in the system or its parts, as drug remedies. Jonathan Hutchinson declares that arsenic may be a cause of cancer. "Even a continuous inhalation of arsenic from arsenical wall papers has been observed to produce the characteristic manifestations of arsenical poisoning characterized by the several manifestations of sux-oxidation." (Dr. H. Wakefield,

Pathology of Katabolism in relation to the etiology and pathology of Cancer. *American Medicine,* Nov. 22 and 29, 1902). The same thing is true of mercury and the common amalgram fillings in the teeth. We have demonstrated the mercurial symptoms and reactions in such cases. (*Medical Advance,* Oct., 1906, H. C. Allen, M. D.; amalgram poisoning, G. F. Thornhill, M. D., *Medical Advance,* Vol. 1, page 179, 1903).

(10) The malignant growth when localized represents two abnormal pathological processes, (1) the weakening of the normal cell life in the locus of the cancer, and (2) the excessive stimulus of cell growth on an abnormal basis creates an excessive demand for nutrition. The abnormal growth is a neoplastic toxic growth and the materials drawn from the rest of the body become intoxicated as they accumulate.

The localization of the cancer process takes place in connection with,

(1) Organs that have passed out of normal service. Hence the frequency of uterine and mammary gland cancers in the female sex in connection with accumulations of obsolete tissue elements at and after the menopause;

(2) Organs or structures subjected to excessive use, especially where the hyperuse results in the formation and accumulation of toxic by-products, that destroy the normal vitality of organs or tissues, such as the liver, stomach and lips in certain cases.

Here there are resultant sub-katabolic products. The cause of this may be an entero-toxæmia, viz: the absorption of intoxicated undigested elements of food in the intestines, especially toxalbumens. These toxalbumens enter into the blood, pass to the nervous system, produce nerve cell nutritive degeneration and weaken and pervert the metabolic processes of the nerve cells. This results in toxic trophic materials.

Normally we have detoxinating glands like the pineal, thyroids and adrenals, that are able to neutralize and destroy the intestinal toxins. The insufficient action of these and other detoxinating glands, like the tonsils, pancreas, may lie at the foundation of the toxic absorption.

(11) Another condition essential in this sub-katabolism is acidemia. This is produced by the appearance in the blood of saccharomycetes with a resultant acidification. The toxalbumens and the excessive acidity unite in exerting a very destructive influence upon the metabolism of the cells, changing the many vital constituents so that when the sub-katabolism is at its maximum there is produced a malignant reconstruction of the cells.

Among the etiological factors (secondary), therefore, we find hyper-acidity in connection with the use of carbohydrates excessively, alcohol, acids, acid fruits and vegetables, foods difficult of digestion which are acted on by acid ferments and increase general acidity.

(12) Another condition that we must mention is the inoculation of virus or poison into the system, that is picked up by the blood or lymph and carried through the entire system. In carcinoma the lymphatic glands are liable to be involved, because the dissemination in the tumor takes place through the lymphatics. In sarcoma the metastatic conditions are established through the blood system, the lymphatics being seldom enlarged. In the benign tumors the lymphatics are seldom enlarged.

Cancer, then, is a disease in which there is a rapid proliferation of cells, fed either by the lymph or the blood. Is it right to inject into, or inoculate the system with a substance consisting of rapid growing and developing cells such as we

find in vaccination? Biologically it is a mistake. "Cancerous diseases may arise from any form of septic infection, whether conveyed in the channel of food or subcutaneously in the form of vaccine lymph. Of late years I have met many cancer cases, all dating back two years, and in every instance where this period of duration was mentioned it transpired on my questioning the patients that the disease had come on subsequently to vaccination during the last epidemic of small-pox." (R. T. Cooper, M. A., M. D., London, Medical Advance, Vol. 41, page 384, 1903. Case cited). What is the effect of the injection of such rapidly developing cells? Profoundly to disturb the metabolism, in fact to bring about a conflict between the cells in the organism and the injected lymph cells. With what result? Destructive results and modified katabolic changes.

To summarize our view, I believe in the origin associated with or resulting from the separation or dissociation of cells (*structural*), reducing the structural to the embryonic state of physical separateness, or lack of physical contact and relation such as we find in normal adult tissues; and the accumulation of effete, waste or toxic matters, whether resulting from auto-intoxication, perverted metabolism and nutrition or active poisoning by poisons introduced into the system (perverted physiology or physiological pathology). But how do we account for these? I believe these to be of nervous origin, originating in nerve exhaustion or depletion.

This localizes the focus of origin by neurosis (along the trophic nerve processes) at the locus of maximum exhaustion. It originates:

(1) In the nervous system weakening and depletion, in connection with the neural bioplasts. Some say the nervous system is immobile and non-contractile. In origin the nerve cells are amœboid and they settle down in the spinal canal as the nervous system matures. The nerve bioplasts originate in the nucleus of the nerve cells and float around in the cerebro-spinal fluid. These bioplasts degenerate under non-trophic conditions. This gives the embryonic cell condition and the state of physical separateness in the localized tissue that makes accumulation possible.

(2) How does it localize in a particular locus? It settles in all diseases at the weakest point physiologically or where the strain against physiological activity is at its maximum. This is the point of least resistance, greatest susceptibility and lowest vitality in the physico-physiological structure of the anatomy of the organism.

Normal vital distribution and life expression take place through this structural mechanism. Hence at the point where the strain is greatest or the resistance least the cyclonic eruption takes place. This is interpreted in the light of lesions that so disturb the adjustment as to create a point of greatest strain or least resistance. The *occasion* arises in connection with *nerve exhaustion* (I use the expression to include both nerve and blood supplies, because the nervous system replenishes and rejuvenates the blood, and the blood in turn supplies materials to the nervous system for nutrition and energy production), whether produced by:

(a) Toxins in connection with the intoxication of the system or parts of it, such as the lips and tongue of tobacco users. Poison may act on the normal body, if it is in excess of the amount which the system can dispose of. Up to the limits of its capacity the body will exclude poisons from the vital centers. Beyond this limit, especially if the poison is taken in continuous doses, accumulation takes place and reactions follow;

(b) Nervous starvation in localized fields of trophicity, such as the stomach, following dyspepsia, ulceration, hyperacidity;

(c) Excessive activity up to the point of exhaustion, vaso and viscero-motor and nutritive, the non-use of organs resulting in hyperplasia, hypertrophy, etc. Illustrations of this are found in continued child-bearing under exhaustive systemic conditions, sexual excesses, and non-child-bearing.

(d) Given this occasion for focalizing the malignancy, the growth is one of the accumulation of waste matters or vitiated nutritive substance.

Dr. Senn in his recent tour in Africa came to the conclusion that cancer can be prevented by the simple life. He claims that the nearer man approaches the lower animals in the habits and diet of a simple life the less liable is he to develop cancer. He confirms the idea formerly expressed that cancer is practically unknown among the natives of the interior of Africa. "Civilized man is like a hot house plant," says Dr. Senn, "and cancer is due largely to over nutrition and luxurious living. . . . Cancer is a disease of civilization primarily, and it is a disease of over-indulgence. I have found in my travels that primitive peoples are immune to its ravages. . . . One prolific source of cancer among women is the high strung unnatural life they lead in the cities. Another thing in civilized society to be fought with vigor is hypernutrition. . . . I emphasize these points, because cancer is an extraordinary development of tissue due to over-nutrition."

(This paper will be continued in the April Journal.—Editor.)

OSTEOPATHY IN EMERGENCIES.

Unconsciousness and Insensibility.

Paper Read Before the A. O. A., at Put-in-Bay, by EDGAR D. HEIST, D.O., Berlin, Ont.

An introductory apology for the subject of this paper will be omitted. It was your choice, and since the thin edge of the wedge of investigation and study of emergency cases, involving unconsciousness, must be applied some time, I will make a weak but bold attempt at an initial effort. The subject is extremely large and the osteopathic profession seem, as a rule, to have no adequate or abiding realization of the part they should take, and the greater part they are bound to play. in due time, not alone in the relief of suffering, and saving of life in emergency cases, but in the prophylactic treatment of readjustment of malconditions, to produce a condition of natural immunity to such cases from resulting stronger vitality.

Possibly, this is due to the fact that the element of danger in such cases deter prompt and hearty aid, especially in localities where legal status has not set its seal of approval upon osteopathy. Consequently, because the profession has, to a great extent, avoided these cases, thus far, very little data is obtainable for an article of this nature. But now when such a large territory legalizes our system, and so many osteopaths are licensed to treat any pathological condition, our colleges and schools should pay more attention to the training in special preparation for the emergency case, so that when the call requires action on the spur of the moment, there will be nothing to detract materially from the effectiveness of the best intentioned efforts.

Under present conditions those of us who have had little practical training in cases of unconsciousness simulating dissolution, and meet such conditions in our constantly growing acute practices, are quite under obligation to the profession and to the community who rely upon us for help, to thoroughly equip ourselves

to meet these emergencies. Preparation would require familiarity with the contents of some reliable text on "Emergencies, or First Aid to the Injured," and then, (1) meeting each case with an idea of overcoming shock and regulating the circulation in different cases according to their disturbances, and (2) utilizing osteopathic skill in manual adjustment to remove the irritating cause producing the condition affecting the vital centers and organs.

Essential to right diagnosis and proper treatment is involved a thorough knowledge of brain injury, and symptoms accompanying nerve and heart phenomena; the many conditions and causes of coma and other unconscious states; a quick appreciation of the indications of the history of falls, strains, and sprains and their immediate and reflex causation of loss of function, and in cases of returning consciousness of pain; and a thorough knowledge of the anatomy and physiology of the vaso motor centers in the different parts of the body, as the osteopathic control of these can not be excelled by other methods.

If we accept as correct Gould's definition of an emergency as "A sudden, unforeseen occurrence, calling for immediate action," then it is very apparent that we have a wide field to cover. We will limit ourselves to those cases that the osteopath meets where there is a considerable fall in the arterial blood pressure, resulting from whatever cause in one of three abnormal conditions—syncope, shock and collapse.

Syncope, ordinarily the simplest form of unconsciousness, is due to a sudden partial or complete cessation of cerebral circulation, or in many cases cerebral anaemia. This naturally depends in the majority of cases on diminished cardiac activity. Nervous, circulatory and respiratory functions either cease or are greatly lessened in strength. The vitality of the system is always lowered, due often to mental shock, severe pain, loss of blood or depraved condition of the tissues. The element of danger is present only if fainting is due to brain disease or cardiac disease, or in old or feeble patients, when death may occur. Other cases usually recover at once or respond readily to treatment.

The treatment for immediate temporary relief, known to all the laity, usually suffices to restore to consciousness, viz: recumbent dorsal posture; no constrictions at throat, chest or waist, plenty of fresh air; and water upon the face and to drink. In extreme cases, resort to manipulative measures brings good results. At different times I have had opportunity to briefly test different osteopathic methods upon a few anaemic patients who had the habit conveniently to faint each time they would come into the office. One case was of ovaritis, two cases of gastritis, and one has apoplectic tendencies. In all of above cases removal of the causative structural abnormalities of these conditions removed the tendency towards syncope. Without resorting to any other than manipulative means, I discovered that inhibition of the vagus would cause the patient to open the eyes slowly and gradually regain consciousness; pressure upon the abdominal aorta would act similarly but slower; stimulation of the cervical vertebral structures had good and quick effect. The quickest recovery was produced by movement of the fifth dorsal vertebra and raising all the left ribs over the cardiac area, particularly the fifth rib. The patient always recovered at once, as if awakening from a sleep, and was conscious almost immediately. Ordinarily I find quick and positive results in placing the patient in the dorsal posture, raising the chest slightly at the level of the fifth vertebra, raising the left rib and elevating the left arm over the head. With the above, manipulate, relax and stretch the cervical structures, relaxing especially about the occipital region.

The most important feature of the treatment is, of course, the seeking of the structural perversion and the removal of the same, allowing, *vis medicatrix naturae,* resulting in the restoration of the patient's vitality and consequent ultimate immunity from attacks of syncope.

The condition called shock, according to Mummery, is the result of a break-down in the vascular hydraulic system which controls and maintains the blood pressure at a more or less constant level during the health of a patient. The primary cause of the break-down is exhaustion of the great vaso motor centers which normally completely control all the changes in the blood pressure which takes place or tends to take place, as the result of outside influences.

Though shock varies from the simple condition known as sleep to that sufficiently profound to cause death, so far, I have been able to collect data on such cases only as osteopaths have treated that have resulted from administration of anaesthetics or the results of an operation. I shall therefore briefly mention the treatment as followed by such as have reported cases.

As in sleep, so in the pathological forms of shock, rest is the first imperative in securing the best results. Place the patient in a comfortable bed, raising the foot somewhat until blood pressure has returned to normal. In severe cases bandaging the limbs and pressure of an abdominal binder will facilitate results. In these cases manipulative treatment will require the utmost care, as changes of position may be attended with sudden alterations of blood pressure which may result in dangerous collapse. Stimulation of the general vaso motor system and cardiac centers will bring about desired results if care is taken to watch strength of patient, and any other indications, and regulate the treatment according to the same. Dr. Howard, of St. Paul, has some very interesting cases that I hope he will some day report for the benefit of the profession.

The object in the treatment of shock is to restore the nutrition of the cell elements throughout the central nervous system. If normal nutrition can be restored or reestablished, the cell will resume its functions, the dendrons will again reach forth in their normal paths collecting the normal nerve impulses from the axones. Circulatory changes are quite secondary to the increase of blood pressure, which will tend to nourish the cells giving them the blood and oxygen they seek, to sustain blood tension. The application of heat is said to have little or no influence upon blood pressure, not tending to raise it except in so far as recovery of the vaso motor centers will probably occur more readily if their blood supply is at the normal rather than sub-normal temperature.

Collapse results from fall in blood pressure due to inhibition of the vaso motor centers, or a loss of circulating fluids in the vessels. Two cases have come under our direct notice. The first was poisoning from headache powders. The patient's head grew worse after taking the powders and twenty minutes later when he came for relief he complained of extreme pain in his head and immediately fell over unconscious. The usual treatment for syncope restored partial consciousness, sufficient to learn that he had taken the powder and what it was. An emetic of warm water and the finger plunged down his throat brought up a light green shiny vomitus. Patient at once went into spasms, became hysterical, rigid, and then collapsed. Respiration was suspended and the cardiac action stopped. The vaso motor system was vigorously stimulated, violent stimulation was applied to the cardiac centers and especially over the heart, (in fact a heavy, well directed blow over the heart restored action when the suspension was of too long duration), and dilatation of the rectum, had restorative effect upon the patient. A number of

attacks, each lighter than the previous one, kept us busy a little over two hours, when the patient completely recovered with the aid of artificial respiration. All after effects were, a sense of depression and a chilly dopey feeling that lasted a few days.

A second case was septicaemia due to negligence and improper after treatment following a miscarriage. Patient was weak, anaemic, and on the verge of prostration from over exhaustion. Nervous and extremely irritable and whimsical, she suffered very much pain in the pelvic region radiating from there in all directions. Pain became worse until she collapsed. Treatment similar to the foregoing kept her heart beating and a gradual improvement for a few hours under a continuous treatment left her at last in a restful sleep with normal respiration and cardiac action. Neither of these two cases were so weak but that they could stand vigorous treatment.

A deplorable dearth of facts upon the subject of unconsciousness in emergency cases, exists in osteopathic and medical literature, so that there is much room for original research along this line.

26 King St. East.

OSTEOPATHY IN EMERGENCIES.

Fits or Seizures.

Paper Read Before the A. O. A. at Put-in-Bay by A. B. King, D.O., St Louis, Mo

In discussing this subject I have seen fit to discuss it from my own experience, believing that it will invite more discussion, and perhaps be of more lasting good to us than if I embodied in what I have to say the experiences and theories of a number of the profession. One must necessarily be either an old physician, or have had a hospital practice, in order to have had a large experience in these cases, for the reason that the great majority of them are epileptic, and the convulsions are either over before a physician can get to them, or the family is so accustomed to the attacks that they do not call a physician for emergency treatment.

In diagnosis we associate general convulsions with epilepsy, uraemia, puerperal and infantile eclampsia, hysteria, and poisoning from lead, aconite, prussic acid, and alcohol. Also they appear frequently, according to Butler, in the later stages of organic cerebral disease; as in infantile hemiplegia, tumor, cyst or sclerosis of the brain, cerebral syphilis and general paresis, as well as in meningitis, haematoma of the dura mater, and other inflammations of the membrane of the brain and spinal cord.

We are specially interested today in those conditions in which the fit or seizure, or general convulsions form the leading symptom. Of these, infantile eclampsia is perhaps the one that we meet with most frequenly, as most of these attacks are with children two years old and under, it is important that they be relieved at the earliest possible moment. There are a number of causes for this condition, the most frequent being the over-eating of indigestible food, rachitis and gastro-intestinal disorders. If the convulsion is accompanied by high fever and vomiting, in a child who has previously enjoyed good health, one is justified in suspecting scarlet fever, pneumonia, malaria, infantile hemiplegia or acute meningitis, even though an acute attack of indigestion is alone responsible. If the convulsion appears to be due to neither of these causes, we must look for some

peripheral irritation, as dentition, phimosis, or disease of the middle ear, and I know of one case where the convulsions were caused by a foreign body in the ear.

An eclamptic seizure differs in no way from an attack of epilepsy. The clinical picture is the same. There is the aura, the cry, the convulsive movement, the spasm, first tonic then clonic, the stertorous breathing, frothing at the mouth, the tongue may be bitten, and all followed by stupor or coma, so that in our diagnosis we must depend upon the history of the case rather than the character of the convulsion.

If the spasm is caused by over-eating of indigestible food, it may be the direct result of irritation in the stomach; or it may be on account of an acute rise in temperature; or it may be the result of a toxic condition of the blood; the latter, however, is more apt to be the cause in the convulsions caused by gastro-intestinal disorders. Where the attacks are accompanied by high fever, whether it be scarlet fever, pneumonia, or any of the febrile diseases of childhood, it is safe to say that the cause is found in the high temperature, which ushered in the disease, rather than in the altered condition of the blood, for the reason that with lowering of the temperature the convulsions cease. If, however, the attacks occur at a later stage of the disease, they are undoubtedly the result of a toxic condition of the blood, the nervous centers being completely overwhelmed, and relief must come quickly or the attack will end fatally.

In addition to the febrile affections of childhood is another cause which I have not mentioned, and one which is of considerable importance, and yet apt to be overlooked, and that is helminthiasis. These occur as the result of a toxic condition due to the intestinal catarrh induced by the presence of the worms, or it may be the result of the irritation in the intestine caused by the presence of the parasite. In either case, a removal of the worms will usually stop the convulsions.

Another class of eclamptic seizures occur at puberty. These are usually diagnosed as epilepsy at once; but I am persuaded that many of them are eclamptic. The class of children in which I have been able to observe this condition have been children of parents of nervous temperament. They have enormous appetites, and have been allowed to gratify them to the fullest extent. With the exception of two cases, they have been children that mature late, from fifteen to eighteen years. Given an exalted nervous condition, and a stomach filled with indigestible food, and we have an ideal condition for eclampsia, and a condition too that, once the convulsive habit is acquired, may become epileptic.

I cannot discuss puerperal eclampsia, except theoretically, for the reason that I have had no experience with such cases. These cases are, or should be, so thoroughly prepared for the puerperal period, by thorough osteopathic treatment, that such a condition would not likely occur. This, as well as uraemic convulsions, is a toxic eclampsia, and should be treated accordingly.

Hysteria, like epilepsy, the physician does not often see in convulsions. The attacks are not so severe, and consciousness may be retained during the attack. Usually the position taken by the patient will give the key to the diagnosis. It is unimportant, however, as far as emergency treatment is concerned, as it is doubtful if any hysterical attack alone ever proved fatal.

Diagnosis of epilepsy may be easy, or it may be very difficult, but, as I have said before, we do not often see the patient in a convulsive state. I had an experience less than a month ago that I will not soon forget. I was treating a case of epilepsy; the patient complained of a slight pain above her eyes; I placed my

fingers lightly on the nerves as they emerged from the orbit; and she immediately went into convulsions. Her friends said it was the severest attack she had ever experienced. As there were other conditions favorable to an attack, I could not tell just how much the peripheral irritation of those nerves had to do with it, but believe it was the immediate or exciting cause.

Some authors give this as a differential diagnosis between epilepsy and tetany, irritation of the nerves at a point where they leave the bony structure, bringing on an attack in the latter. This may have been the exception which proves the rule.

Since these cases have no pathology, we must treat the convulsion merely as a symptom. The condition, according to an accepted theory, is that the disturbance in the nervous system, particularly in the medulla and vaso motor system of nerves, induce a spasm in the contractile fibres of the vessels supplying the brain, and in those of the muscles of the face pharynx, larynx, respiratory apparatus, and limbs generally. When these vessels contract, the brain is deprived of blood, and there is an arrest of consciousness. The face is deprived of blood, producing the extreme pallor. The muscles of the organs I have just mentioned contract, and the chest walls become fixed, respiration is arrested, the peculiar cry is uttered, and we have to deal with the general symptoms of asphyxia; hence, the necessity for haste in the treatment, especially of the very young.

In the treatment of these conditions, except in the case of specific poison, which must be treated by emesis, lavage, or some antidote, we first make strong pressure in the sub-occipital region. This quiets the irritated meningeal nerves, restores arterial tone, and reduces the rate of the heart beat by diminishing impulses from the augmenter center situated near the vaso-motor center in the medulla. This followed by relaxation of the muscles in the upper dorsal region will restore normal respiration, and if the patient be an epileptic he will usually say he had a very light attack, and will be free from the painful headache attendant upon these attacks.

In the treatment of the eclampsias, if it be the result of an overloaded stomach, emesis will relieve the condition at once. If from gastro-enteritis, there is a toxic condition to be overcome as well as a febrile. No one is more at home in reducing fever than an osteopath, and after a thorough manipulative treatment to that end, and a thorough cleansing of the bowels by an enema, you can rest assured that your emergency treatment has been well done.

If the case be very grave, after the enema an injection of a normal salt solution high into the colon will stop fermentation for the time, will raise the blood pressure, and I believe it must help to remove the impurities from the blood. At least, the results are very gratifying. I know that in making this statement that I am throwing myself open to criticism as not being a thorough osteopath, but I do it purposely to emphasize the point that in emergency cases we are justified in doing anything to save the life of the patient. It is possible that the osteopathic treatment would alone bring the results desired, but I have never waited to see, as I felt that I must do everything possible before leaving the patient. In treating infantile eclampsias, if I am called by telephone to treat a case I tell them to immediately put the child in hot water. This relaxes the tissues, and usually by the time I arrive the convulsions have ceased, when the proper treatment can be applied for the removal of the cause.

If helminthiasis is suspected, an injection into the bowels of a twenty-five per cent solution of lime water will confirm your diagnosis, will remove at least a part

of the cause of the irritation, when the proper osteopathic treatment can be applied.

In the class of eclampsias occurring at puberty, we have another condition to deal with. We have the spinal lesions most marked. I have noted in a case of this kind a broken, straight spine with well marked lesions from the third to the eighth dorsal vertebrae, notably at the sixth.

If I may be permitted I would like to relate an experience I had three months since showing the necessity for emergency treatment, and also the futility of it when certain structural changes have taken place. A lady about 45 years old, a magnificent specimen of physical and mental womanhood had been having occasional epileptic seizures for ten years. I had been attending her for two years. I never saw her in a convulsion, but was usually there immediately after the attack. She had been unusually well for some time, when one night just after retiring she was taken with convulsions. Her immediate family realized at once that it was more severe than any previous attack. I was called, and arrived in about ten minutes after the seizure, but she was beyond all help. There had been but little circulatory disturbance, apparently, except that her heart was hypertrophied; but during the embalming of the body it was discovered that the lumen of her arteries was only about the size of a knitting needle. Her trouble was undoubtedly circulatory, and in the care of all these cases our first endeavor should be to equalize the circulation over the body, and especially in the cerebral vessels, at the earliest possible moment.

309 Mermod and Jaccard Building.

President Ellis on the Norfolk Meeting.

At a recent meeting in Norfolk, attended by Dr. W. D. Willard, Dr. E. H. Shackleford, Dr. Geo. D. Fout, Dr. Earl S. Willard, Dr. W. F. Link, and myself, the plans for the coming meeting were thoroughly gone over. The location of the exposition grounds where the sessions will be held seems quite ideal, surrounded as it is almost entirely by salt water and looking out directly on Hampton Roads, Old Point, and the James river. In spite of the fact that the situation is in the south I believe that we shall be comfortably cool there in August.

The convention hall which has been secured for the last week in August is particularly adapted to the use of assemblies like ours, being provided with a fine auditorium and several large light rooms for clinics and committee meetings. The Inside Inn, which will probably be our headquarters, is a very few minutes walk from convention hall and no doubt will prove very comfortable, although it was only partially completed at the time of our visit.

Our sessions have been arranged to keep every one interested and busy during the morning hours, while after luncheon the time for the most part will be free and may be devoted to visits to various points of interest of which the neighborhood has a great many. We feel assured of an abundance of clinical material to carry out the very practical program that has been outlined. The exposition officials seem disposed to do everything in their power to make our meeting a most pleasant and successful one and the local committee headed by Dr. W. D. Willard is certainly doing splendid work in the right direction. If members will make a special effort to attend we should make this the banner meeting of our history.

S. A. Ellis.

Boston, Mass., Feb. 18, 1907.

Warning

Mr. A. Lovie, representing himself as agent for the Imperial Publishing Company, 27 E. 22nd St., New York, is, or was early in February of this year, taking orders for the Edinburgh Stereoscopic Anatomy, collecting all or part of the purchase price and giving receipts on the stationery of the above company. A letter from the Imperial Publishing Company, dated Feb. 25, 1907, and signed by Geo. T. Finn, secretary, written to Dr. J. R. Shackleford, Willcox Building, Nashville, Tenn., states that "the Mr. Lovie referred to has not been in our employ for some time, and we cannot understand why he should have accepted your check for a set of the work without advising us. * * * The last heard from Mr. Lovie he was in the far west, but do not know where or who he is working for."

We publish this so that members of the profession may be on their guard.

Any one knowing of the whereabouts of Mr. Lovie will confer a favor upon Dr. Shackleford by wiring him, at his expense.

Trustees of the Post Graduate College.

The Trustees of the A. O. A. have chosen the following members of the osteopathic profession as members of the Board of Trustees of the Post Graduate College:

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There are ten lay members of this Board to be selected, and it is hoped that their names can be announced in the next number of the JOURNAL which will contain a full discussion of the subject of the Post Graduate College.

A. O. A. Journals For Sale.

UNBOUND COPIES.

We have a number of complete files of volumes IV and V, unbound, for sale at 60 cents per volume or 5 cents each for single copies. These journals have so encroached upon the space in our office as to render it necessary to dispose of them. Those desiring copies of the above should order at once.

CASE REPORTS.

The above offer of 60 cents per volume does not include case reports, which were issued as supplements to the JOURNAL. We have a number of each of the first five series that have been issued which will be sold to members at 10 cnts per copy.

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We have a few cloth bound copies of Volumes I, III, IV and V, indexed. These will be sent post paid to any address at the following prices: Vol. I, 75 cents per copy; any of the others $1.50 each.

A Chiropractor Fined.

William Metzger, a chiropractor, was fined $50 on February 6 at Butte, Mont., in Justice Rhoade's court. The charge was practicing medicine, or osteopathy, without a license. The conviction was secured on the testimony of Drs. S. A. Kennedy and L. K. Cramb, osteopaths, who maintained that the defendant employed in his practice the principles and therapeutics of osteopathy under another name. The case has been appealed to the district court.

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MARCH 1, 1907.

Date of Norfolk Meeting.

The time of holding the next meeting of the A. O. A. has been definitely determined. It will open on Monday, August 26, and close Friday, August 30.

The program for the Norfolk meeting, which will be nearly ideal, is nearing completion and will appear in the March JOURNAL.

Osteopathy and Legislation.

At the present time, so far as we are able to learn, bills for the regulation of the practice of osteopathy are, or have recently been, before the legislatures of the following states: California, Illinois, Maine, Massachusetts, Nebraska, New Jersey, New York, North Carolina, Oregon, Pennsylvania, South Dakota, Texas, Washington and West Virginia. In addition to the foregoing bills are pending in the United States congress and the legislature of the Province of Ontario.

We have received a great number of copies of bills, reports of hearings before committees, letters from those having bills in charge to members of the profession, replies to arguments of medical men, and newspaper clippings on the subject. Indeed, we have enough of this kind of literature to fill this number of the JOURNAL. Interesting, important, and instructive as much of this matter is, considerations of space will compel us to give merely the outline of the latest news that has come to hand concerning the situation in the various states.

In each case where legislation is pending, according to our best information, the osteopaths are asking for an independent board, and in most states, where the profession is united, the prospects of success are favorable.

In California, for a time, it appeared that two bills would be urged by opposing factions in the profession, but we are pleased to announce that their differences were reconciled and a compromise measure agreed upon. This provides for an osteopathic board of five members to be appointed by the governor, from a list of fifteen recommended by the state association, the number recommended to be selected by mail ballot, and school men to be disqualified from serving on the board. All licensed osteopaths in the state are to be eligible to membership in the state association.

The osteopaths have also presented a bill which, if it passes, will enable them to obtain bodies for dissection by students.

Since the foregoing was written we have learned that a bill has passed the California legislature providing for a composite medical board, with two osteopathic members; this is the same representation accorded to homeopaths and eclectics. The bill, it is said, gives to osteopaths the same privleges and protection that the M. D.'s enjoy. We do not know what situation developed that resulted in such a compromise, and cannot but regret that it was made. Considering the present status of affairs in the healing sciences, and the well known attitude of the "regulars," we fear that the osteopaths, with a minority membership on a medical board, will not find its practical operation satisfactory.

In Massachusetts, it appears from newspaper accounts, that the osteopathic profession is again divided in opinion as to the proper method of regulating the practice in that state. At a hearing before the public health committee on Feb. 11, Drs. W. E. Harris, Dale E. Brown and Harry N. Broadbridge favored a bill compelling osteopaths to pass the regular state medical examination. This was opposed by Drs. C. E. Achorn, F. A. Dennette and others. A bill providing for an osteopathic examining board is also before the legislature.

In New York a hearing was had before the committee on Feb. 7. Hon. Martin W. Littleton and Drs. Chas. F. Bandel, Chas. Hazzard, Ralph H. Williams and C. W. Proctor appeared for the osteopaths. A good impression was made, and the osteopaths are more hopeful of success than they have ever been.

In Oregon Dr. Chas. C. Teall ably led a hard fight under adverse conditions. The following telegram from Dr. F. E. Moore, dated Feb. 23, tells the result: "Independent board denied, amended substitute passed, one osteopath on medical

board." We learn from those on the ground that under Dr. Teall's resourceful leadership osteopathy, though not entirely successful, at least gained in prestige, as a result of the contest.

The Pennsylvania osteopaths are fighting for an independent board. The bill is similar to the one that was vetoed a couple of years ago by Gov. Pennypacker, and which was opposed by the committee on legislation of the A. O. A., because of the requirement of a four-year course of study. This year the bill will not be opposed by the A. O. A., and it stands a good chance of passage. The osteopaths of the state did good work in assisting to kill a medical monopoly bill.

The fight in West Virginia between the osteopaths and medical men, each of whom were asking for legislation, had assumed a stage where it seemed that both bills would be defeated. Ths osteopaths finally withdrew their bill and allowed the medical bill to pass. This was done, however, only after the M. D.'s, through their attorneys, had agreed that the following should appear in the medical bill: "And provided further, that this act shall not apply to osteopathic physicians practicing in the state at the time this act takes effect, who are graduates of any recognized reputable school of osteopathy." The letter from the attorneys conveying the above proposition also contained this language: "And it is further agreed that just and equitable treatment shall be accorded to osteopaths."

While there may be some difference of opinion as to the wisdom of accepting this compromise, and of relying overmuch on the promise of "just and equitable treatment," yet considering the long, hard fight the osteopaths of West Virginia have made, there will be few disposed to blame or to judge them harshly. Especially will this be true when it is known that the law provides that the board shall call to its assistance, in the examination of any applicant who professes the osteopathic school of medicine, a physician of that school duly entitled to practice in the state under the act in question. The law also provides that certificates issued to osteopaths shall entitle them to practice medicine, surgery and osteopathy in all their branches.

The bill before the National House of Representatives providing for an osteopathic examining board for the District of Columbia, has not been reported by the committee and it is now so late in the session and there are so many matters ahead of it that no hope of its passage is entertained. At the next session work will be begun early and pushed to a conclusion.

In Ontario the legislative situation looks hopeful, and favorable results are expected. It will probably be several weeks before final action is taken.

The Treatment of Lumbago and Other Painful Conditions of the Musles of the Back.

The above is the title of an interesting paper by Thos. W. Brockbank, M.D., Philadelphia, president of the Pennsylvania Society of Physico-Therapeutics, which was read before the American Electro-Therapeutic Association at Philadelphia, September 19, 1906. The paper was published in the *Journal of Advanced Therapeutics* for January, 1907.

The doctor outlines methods of examination in these cases very similar to those employed by osteopaths and finds areas of pain where the patient had not complained of special pain. He even notes deviations of the spinous processes of the vertebrae which are forced out of normal alignment by severe muscular contractions.

The discussion brought about by this paper revealed the fact that several of

the doctors present had heard of and believed in luxations of ribs, vertebrae and the sacro-iliac articulation. Dr. Brockbank was honest and brave enough to declare as follows: "I feel certain that many of the painful conditions we find in the back are due to these partial luxations, and it seems a shame to me that we have to acknowledge that we have been stirred up to the point of hunting these things up by our friends, the osteopaths. I am often asked by patients and physicians, what I think of osteopathy. Gentlemen, I think well of it, if it is properly applied by the right people.

"In all these conditions there is a source of irritation, and we all know that the first effect on a part when subjected to irritation is to increase its physiological function. If as a result of this the muscles on one side have become contracted and the corresponding muscles have not partaken of this increased activity there will be a luxation as the result of muscular action, not as the osteopaths would say, the disease is due to the luxation.

"It makes no difference what the osteopath thinks of us or we think of the osteopath; we meet conditions just as they are in every-day practice, and if we are not going to use a modality that will do good, we are not the men to practice progressive medicine. It makes no difference to me from what source a good thing comes, I try to store it away in my memory and use it when I have a chance. I have had cases where a luxation was definitely marked, not only in the spinal column but in the heads of the ribs—so much so that under treatment you could feel and hear the head of the rib slip back into position. If the head of the rib is partly dislocated there is pain and no matter how much you do, if you do not do the thing which will relieve the muscle tension and relieve that sub-luxed bone, you will not have good results. The same condition is often found in the sacro-iliac joint which often causes pain along the sciatic nerve."

We may add that osteopaths generally will agree with Dr. Brockbank that osteopathy is only good when "properly applied by the right people." We believe further that the right people to properly apply it are those specially trained in its theories, principles and technic. If Dr. Brockbank had read osteopathic literature with a little more care we feel sure that he would not have given the impression that osteopaths hold that all disease is primarily due to a luxation. It has been pointed out frequently that the luxation may be, and often is, a secondary factor; but one nevertheless that in many instances prevents recovery. We venture to predict that not many years will elapse before medical men will be forced to acknowledge, perhaps not without "shame," that they have been, by osteopathic theory and practices "stirred up to the point" of accepting as causative or maintaining factors in most diseases the various luxations which some of them have already been forced to admit are present in painful conditions of the muscles of the back.

Osteopathic Nomenclature.

A recent letter from Dr. H. W. Forbes contains these words:

"I am much interested in the problem of osteopathic nomenclature, particularly in connection with the naming of vertebral lesions. Might not a uniformity of nomenclature be facilitated if a committee of the A. O. A. would take the matter up?"

Nearly five years ago the problem mentioned above by Dr. Forbes suggested itself to the editor of the JOURNAL, who invited Dr. Chas. Hazzard to discuss it.

Dr. Hazzard responded with an article under the caption, "The Language of Osteopathy," which appeared in the JOURNAL for March, 1902. The following paragraph from this article shows the need of care and close attention to the subject of terminology:

"Every science has its technical terms. The growth of a new body of knowledge calls for new words to express new ideas. Thus there is, of necessity, growing up a language of osteopathy which is fitted to express the ideas, which are fundamental to the science. But an effort is necessary to preserve the growth of this language along lines of simplicity and purity. Vulgarity on the one hand and stilted verbosity on the other must be guarded against. The fact that osteopaths use medical text books to a great extent in pursuing the studies essential to the science of osteopathy leads to a very real danger of their falling into the vices of the language of medicine."

While we believe there has been a marked improvement during the past five years, and that many of the errors and inaccuracies pointed out by Dr. Hazzard in the article above mentioned, have been eliminated from our language, yet there is doubtless still much room for improvement. We therefore take pleasure in putting Dr. Forbes' suggestion before the profession.

The Osteopathic Lecture Bureau.

About seven years ago the question of the establishment of an osteopathic lecture bureau received considerable attention. A number in the profession advocated it as an ethical and effective means of introducing the science. Others opposed it on the ground that it would savor too much of an advertising scheme on the part of the local osteopath where the lecture was given. A committee was appointed at the Chattanooga meeting of the Association in 1900 to consider the matter and report a plan to the succeeding meeting. This committee, consisting of Drs. F. W. Hannah, D. Ella McNicoll and W. L. Riggs, which had been appointed to collect and formulate material for the Association lectures, reported at the meeting in 1901, that there was a wide divergence of opinion in the profession as to what the lectures should embrace, as well as what should be included in the practice of osteopathy. The committee further stated that there was quite a difference in regard to studies taught, even in the recognized colleges. For these reasons the committee asked to be discharged, and expressed the hope "that the work assigned to us may be taken up at some future time, when the recognized standard will be sufficiently high to enable us to meet and master the emergencies that may arise in the *general practice* of the therapeutic profession, and when the recognition of that standard will be more universal among schools and practitioners." This report was adopted and nothing further done in the matter.

During the years that have passed since 1900 the public interest in health questions has undoubtedly increased, the awakening to the dangers of drugs, both patented and prescribed, has been more marked; in numerous instances osteopaths have appeared, by invitation, before cultured audiences and have been listened to with profound attention. These considerations, together with the facts that at this time, perhaps, more than at any other in the history of osteopathy its theories, principles and practices are systematically misrepresented by interested parties; that the medical profession has an organizer in the field working in the interest of medical legislation who sometimes delivers public lectures; and that there are now so many osteopathic practitioners in the larger cities and towns that

the appearance of personal advertising would be greatly lessened—these all make the question of adopting the lecture method a live and practical one.

These remarks are called forth by the fact that plans for the establishment of an osteopathic lecture bureau are now almost perfected. Dr. F. D. Parker, 708 New York Life Building, St. Paul, Minn., is the manager. It is his purpose to have osteopathy expounded in a dignified, entertaining and eloquent way by men who "know osteopathy and can tell it." It goes without saying that the success of the venture will depend very largely upon the personality and ability of the lecturer, as well of course, as upon the co-operation of the profession. So careful has Dr. Parker been in the selection of lecturers that he is able at this time to announce the name of but one—Dr. Mason W. Pressly, of Philadelphia. Dr. Pressly's qualifications for this work are too well known to our profession to need commendation from us. We believe there are a number in our ranks who can fittingly and effectively represent osteopathy on the hustings.

Most osteopaths consider it proper and ethical to furnish to their friends information concerning osteopathy by means of the printed word. We are not prepared to say that it would be any less so to invite them to listen to an address on the subject. We are all desirous that people should know of the beneficence of our science and it is doubtless true, as quoted by Manager Parker in his literature, that "There is no persuasive force so potent as the spoken word." If through means of a popular lecture, setting forth the theories, principles and results of osteopathy, people should become attracted to it and the practice of the osteopaths in the community be increased, would that fact constitute a valid argument against the lecture method?

At any rate we shall watch this venture with interest, both as to its reception by the profession and the public.

Harmony in California.

We are informed that the teachers in the Los Angeles College of Osteopathy have been elected to membership in the state association, and as evidence of the further harmonious relations existing in the profession, we give the following circular letter issued on Feb. 6, by Dr. R. D. Emery, president of the California State Board of Osteopathic Examiners:

Dear Doctor—A compromise has been reached by which the differences in the osteopathic bills known as the "Amended Bill" and the "Lemon Bill" have been adjusted and harmonized. These compromised amendments are now before the lgislature, and they are strongly recommended by the State Association, by the Los Angeles College of Osteopathy and by the profession at large. They provide for the appointment of the Board of Examiners by the Governor and for the licensing of all practicing osteopathic physicians in the state, not already licensed, who hold a diploma from a reputable osteopathic college, requiring a full twenty months' course. The license is to be granted, without examination, upon presentation of the diploma to the board accompanied by a fee of twenty-five ($25) dollars.

Applicants desiring to commence the practice of osteopathy after the passage of this act, must pass an examination and pay the $25 fee.

The present Board of Osteopathic Examiners, appointed by the State Association, has at all times endeavored to voice the sentiment of the profession. The State Association and representative osteopathic physicians from all portions of the state have now made it clear that they desire that those now practicing in the state, who are graduates of the Los Angeles College of Osteopathy, the Still College of Osteopathy, the Columbian College of Osteopathy and other colleges giving a full twenty months' course of instruction, should be granted a license to practice.

Furthermore, it is true that they will receive their licenses as soon as these amendments pass.

The present board realizes that under the conditions as they exist it would be manifestly unfair to continue to refuse licenses to graduates of the above mentioned colleges, thus

compelling each of those graduates to pay a fee of twenty-five ($25) dollars for a license when the present compromise amendments become a part of our osteopathic statute, which may be in a week or two.

Therefore the board hereby notifies all osteopathic physicians, wherever located, who are graduates of colleges giving a full twenty months' course in osteopathy, that upon presentation of their application, together with their diploma, and accompanied by a fee of ten ($10) dollars, the Board will immediately grant to each a license to practice osteopathy in this state.

Applications should be sent to Dr. J. Strothard White, Secretary, Slavin Block, Pasadena.

When the item was written for the February JOURNAL concerning the hearing before the house committee on the District of Columbia, on the bill to regulate the practice of osteopathy, we had not received a copy of the official report of the hearing. From this we learn of the valuable assistance rendered by Mr. J. F. Tufts, of the Interior Department. Mr. Tufts, who had written the bill, controlled the time for the osteopaths, and made an able argument, presenting much documentary evidence in support of the bill. Whatever may be the fate of the bill the profession is under great obligations to Mr. Tufts and Dr. Hazzard for the able manner in which our claims were presented. Mr. Tufts is the father of Dr. Clarissa B. Tufts, of Washington.

We begin this month the publication of a paper on cancer, from the pen of Dr. J. Martin Littlejohn, which will run through several numbers of the JOURNAL. The paper will be followed by a tabulation of cases treated showing remarkable results in this dread malady. The paper is the result of several years of study, research and clinical experience on the part of Dr. Littlejohn. It is a notable contribution not only to the scientific literature of osteopathy, but of cancer as well, and we feel exceedingly fortunate in being able to present it to our readers.

Secretary Chiles has been ill for several weeks with a low grade of typhoid fever. We are glad to be able to report that he is now improving, and will perhaps be able within ten days to resume his duties. His illness has delayed the work of selecting the lay trustees for the Post Graduate College, but we publish elsewhere in this number the names of the osteopathic mmbers that have been chosen.

The editor of the JOURNAL expects criticism and can even stand censure, but he draws the line at being libeled. To be accused of being a Spring poet, without ever having done anything to deserve it, and to have such alleged poetry attributed to him as appeared in the *Osteopathic Physician* for January, is going altogether too far, Brother Bunting!

We have had frequent inquiries concerning the general directory of the profession which is being gotten out by Dr. R. E. Hamilton, a copy of which is to be mailed to each member of the profession. Our information is to the effect that it is about ready for the press, and we trust that within the present month it will be delivered.

It is not yet too late to enter the A. O. A. prize essay contest for 1907. Glance over the announcement on this subject which appeared in the JOURNAL for Octo-

ber, 1906, or write to Dr. W. F. Link, Knoxville, Tenn., for the terms of the contest.

NOTES AND COMMENTS.

Dr. Smith and the Patrick Case.

The *Sunnyside*, of New York, one of the leading journals of the embalmers' profession, devotes a large part of its February issue to an article by our old friend, Dr. William Smith, which may have an important bearing on the celebrated Patrick murder case, if the attention of Governor Hughes can be brought to the matter.

It will be recalled that an important part of the evidence on which Patrick was convicted of the murder of the old millionaire Rice was furnished by the testimony of medical experts who told the jury that embalming fluid injected into the brachial artery could not possibly enter the lungs, and that the congested and edematous areas found in the dead man's lungs were doubtless caused by the inhalation of choloroform.

This was the theory of the prosecution, and the convicted Patrick, after various sensational trials, has just entered on his term of life imprisonment, the death sentence having been commuted by Governor Higgins last December.

Recently, by chance or providentially, the medical phases of the case as disclosed by the testimony of the experts were brought to the attention of Dr. Smith, who instantly remembered his work in injecting cadavers for dissection and in X-Ray photography while he was a professor of anatomy in the American School of Osteopathy, some eight years ago, and prior to the death of Rice, furnished documentary evidence that flatly contradicted the testimony of the medical experts.

He forthwith went to Patrick's lawyer, Judge Olcott, and exhibited his proofs, which consisted of a series of skiagraphs, made eight years ago, showing that the colored fluid which had been injected into the femoral artery had actually and visibly entered the pulmonary vessels.

Dr. Smith pointed out what every student of anatomy knows, and certainly what every medical expert should know, that embalming fluid injected into the arterial system, either by way of the brachial or the femoral artery, will undoubtedly penetrate the lungs in three ways and possibly in four:

(1) Absolutely without hindrance by way of the bronchial arteries; thence through

(2) Venous capillaries and bronchial and azyos veins to the right side of the heart; and thence into the lungs again by way of the pulmonary artery.

(3) By way of the coronary arteries, capillaries and veins into the right side of the heart, and thence through the pulmonary artery into the lungs; or,

(4) When the heart is enfeebled, as in old age, its valves may offer little resistance, and embalming fluid under ordinary pressure may pass back through the aortic and mitral valves to the left ventricle and thence out through the pulmonary veins into the lungs.

Dr. Smith's article and the accompanying photographs in the *Sunnyside* show all this very clearly, indisputably, and the obvious conclusion is that the proof of Patrick's guilt, at least so far as the testimony of the medical experts for the prosecution is concerned, has not a leg to stand on.

At all events Dr. Smith's chivalrous attempt to undo what he believes to be a great wrong will enlist the sympathetic interest of his fellow osteopaths everywhere, many hundreds of whom are old students of his, and know of his brilliant abilities as a lecturer on anatomy.

W. F. LINK, D. O., Knoxville, Tenn.

Treating Syphilis With Gloved Hands.

The article in February JOURNAL by Dr. Young filled a long felt want. Complete, comprehensive and extremely practical, it serves as a basis from which we may speak knowingly when (occasionally) confronted by this class of cases. Naturally we abhor the very word syphilis, and to be actually consulting or even conversing with a known case, almost gives one the shivers. But as true physicians we are to study and investigate every phase of all ailments, so we are face to face with the proposition.

I want to tell of a little experience I had with a very bad case of syphilis in secondary stage, and how I conducted treatment, diet and exercise. Patient, woman, 35, fair, 160 pounds, good hereditary diathesis, splendid early environment, mother of one child. Disease contracted by relations with husband. Sexual organs primarily infected, internally, abscesses, followed by more or less rectal stricture, existed. Bowels quite regular, kidneys somewhat affected.

For a short period temporary blindness (from the disease) existed in one eye. (Sight returned after treatment).

Body, except external genitalia, more or less irregular mass of rash or exanthem. Apparently a mass of chancroids and chancers. Elbows and lower limbs were almost a mass of

coalesced ulcers principally of chancroid nature, while other areas had all appearance of typical chancers. Patient quite feverish at times.

Treatments were given at the house, and only after patient had prepared herself by bathing, combing hair tightly to head, fastening in place by many pins, and every sanitary (at least) precaution taken.

For fear I might contract the disease by direct contact with patient, through some seen or unseen abrasion, I put on a pair of gloves, which did not seem to interfere especially with the giving of a good general treatment and insuring immunity from direct infection. To my surprise I found the case gaining quite rapidly. This continued with periods of apparent stasis, occasionally, but of short duration. Diet, restrictive and selective, maximum amount of fruit and green vegetables, such as figs, dates, sweet oranges, much celery, lettuce and whole wheat bread; little tea, no coffee and no meat; occasionally eggs and white fish. Of these articles she could eat all she desired, not being an over-eater naturally.

At first she remained in bed most of the time, on account of febrile condition. Nurse was instructed to keep windows open all the time giving patient plenty of cover. Baths given daily and a vegetable salve applied to ulcer, covered with absorbent cotton and over that loose, light bandage. The application seemed to draw out the foul material and deposit it on the absorbent cotton, leaving sore quite free from detritus each time. Every hygienic measure was carried out and patient given encouraging suggestions daily as a favorable prognosis.

Thorough stimulating treatments to kidneys and liver given three days a week.

Patient soon getting up, out-door strolls of short length were advised, usually with some member of the household or with nurse.

Sun baths seemed to do GREAT good. One half hour duration, body protected from cold or draughts, sufficient to keep warm.

All eruptions disappeared from every part of the body, although in my opinion traces of syphilis of secondary stage, will never entirely leave the system, and upon subsequent slight provocations manifest itself in a similar or different manner. . . .

I would not care to treat a case of syphilis barehanded (knowingly at least, although I suppose we do occasionally, especially the primary stage cases). Proper precautions, however, eliminate danger of infection.

A D. O. more than any physician (except surgeons) should mind well the condition of their hands. Any abrasion, however slight, should be protected by liquid court plaster or some skin varnish, and if you feel occasionally you must treat a poor soul suffering from this dreadful disease, there should be no objections on the part of the patient if the physician takes a wise precaution by wearing gloves.

F. P. MILLARD, D. O.,
111Confederation Life Building, Toronto, Canada.

Wisconsin Osteopathic Association.

The ninth annual meeting of the Wisconsin State Osteopathic Association marked an era of development in the history of modern medicine. To those of us who have attended the meetings of the Association from year to year we note with considerable pride the character of the indications which point to this advancement. But a few years ago we used to go away from the meetings filled with enthusiasm of what osteopathy could do and what it meant to suffering humanity, among certain of our cases which had been unusually successful under treatment. Today we go to our meetings——and take with us such cases as have been difficult, or such ones as have not yielded at all. We go to our meetings, not fearful of our failure, but seeking such help from others of different experiences than our own, while in the earlier years of our practice one was almost afraid to say he had failed in a given case.

It is with this kind of enthusiasm that we leave our meetings now, and go home after having not only been *told* how but as well *shown* how to accomplish certain results.

My criticism of many association meetings, both state and national, is that we are not *shown* enough. Much is said but little demonstrated.

The Wisconsin osteopaths had occasion to appreciate the valuable researches of Dr. McConnell. A stereopticon lecture of an hour and a half demonstrated to us that the work as being pursued by Dr. McConnell is invaluable to the profession at large, and also among that class of thinking people who appreciate the why and wherefore. Dr. Francis A. Turfler of Rensselaer, Ind., demonstrated the mechanical side of our therapeutics and many points of value were presented. Dr. Turfler is a genius when it comes to the mechanics of osteopathic therapeutics.

Our own members, however, contributed largely toward making the convention a successful one. Months before the time for the meeting, preparations were under way, with a view to stimulate original thought and research. As a result of this, one of the most valuable sessions of the convention was known as a "Question Congress." Some fifty questions were sent to the committee in advance and these were distributed among those who claimed experience in a given case. As a result of this, practically everyone contributed some valuable suggestions and gave all an opportunity of expression of ideas.

Not the least of the original research work done by the members of the Wisconsin Association was that submitted to us by Dr. J. Foster McNary on "Surgical Indications in Osteopathic Diagnosis." Dr. McNary's work showed the result of practical experience and is worthy of publication in our journals to go down in the annals of the history of osteopathic progress. I trust that an early date will see the same published for the readers of this journal.

Every one who attended this meeting felt that he had gained much in the line of practical knowledge and left with a view of putting that knowledge into actual practice.

Dr. S. J. Fryette was unanimously chosen as president of the Association for the coming year, with Dr. E. M. Olds Vice-President. Our faithful treasurer of five years' service, Dr. Culbertson, was again elected to fulfill the duties of that office, and Dr. Nordhoff was chosen as Secretary. Dr. Breitzman and Dr. Spencer were chosen for service on the Legislative committee and Executive Board respectively.

Drs. W. D. McNary and F. N. Oium Delegate and Alternate to the A. O. A.

E. J. ELTON, D. O., 304 Matthews Bldg., Milwaukee.

San Francisco Osteopathic Association.

The second annual meeting of the San Francisco Osteopathic Association was held in Oakland February 2, 1907.

There was a large attendance, despite the storm, and the enthusiasm manifested speaks well for our science in this state. The northern half of the state was well represented, while Los Angeles sent two of her best men, Drs. Tasker and Forbes.

The following program was rendered:

AFTERNOON SESSION.

Address by President Frank L. Martin.
Clinic—Dr. Rule, of Stockton.
Demonstration—Dr. Meacham, of Oakland.
Paper—Obstetrics—Dr. Myrtle Herrmann, of Alameda.
Discussion—Drs. Harris, Vanderburgh, Rule and Meacham.
Paper—Case Reports—Dr. Josephine Jewett, of Berkeley.
Clinics—Drs. Willcox and Cooper, of San Francisco.
Demonstration—Dr. Forbes, of Los Angeles.
Discussion of Legislative Matters—Dr. Dain L. Tasker, of Los Angeles.
Clinics—Drs. Penland, Cooper, Ponting.

EVENING SESSION.

Letter from Dr. Ivie, of Kirksville, Mo., read by secretary. The doctor having been president of our association for three years, his letter was warmly welcomed.
Paper—Gynecology from a Practical Standpoint—Dr. Effie York, of San Francisco.
Blood Pressure—Dr. Meacham, of Oakland.
Cervical Lesions and Clinical Demonstration—By Dr. T. W. Sheldon, of San Francisco.

SUSAN ORPHA HARRIS, Secretary and Treasurer.

New Osteopathic Association in Pennsylvania.

The osteopaths of the Fourth District of Pennsylvania met in Wilkes Barre December 14, and oragnized the "Northeastern Pennsylvania Osteopathic Association." Dr. Virgil A. Hook, of Wilkes Barre, was chosen president; Dr. W. J. Perkins, Carbondale, vice-president; Dr. A. May Benedict, Scranton, secretary and treasurer. The organization holds its meeting the second Saturday of each month.

A. MAY BENEDICT, Secretary.

Woman's Osteopathic Association.

The Woman's Osteopathic Association of Kansas City, Mo., celebrated the first anniversary of their organization on the evening of February 5th. The following program was given:

"The Past of Our Association"—Dr. Bertha F. Whiteside.
"Professional Ethics"—Dr. Mary E. Harwood.
"The Future of Our Association"—Dr. Mathilde Loper.

A lecture on the "Diaphragm" was to have been given by Dr. Anna I. Peters, but she was unable to be present, much to the regret of the association.

After the program a chafing dish luncheon was served, and the remainder of the evening was spent in a social way.

The officers elected for the ensuing year are:
President—Dr. Anna I. Peters.
First Vice-President—Dr. Nellie M. Cramer.
Second Vice-President—Dr. Bertha F. Whiteside.

Treasurer—Dr. Katherine A. Loeffler.
Secretary—Dr. Mathilde Loper.
The W. O. A. meets the first Tuesday evening of each month at 8 o'clock at 520 New Ridge building. A cordial invitation is extended to all lady D. O.'s who may be visiting in the city.

Applied anatomy has been the general subject studied the past year and with clinical demonstrations much valuable work has been accomplished. The association enters with enthusiasm upon its second year's work and expects good results therefrom.

MATHILDE LOPER, Secretary.

The Pacific College of Osteopathy.

The Pacific College of Osteopathy of LosAngeles, California, graduated its mid-winter class on Thursday evening, January 24th. The commencement exercises were held at the Woman's club house and the large attendance spoke well for the popularity of the college and the general interest of the people in osteopathy.

The music for the occasion was most acceptably rendered by Miss Tillie Burns, an accomplished pianist of South Pasadena, and the "College Quartette," composed of Drs. Adams, Cunningham, Ferrand and Swart. Addresses were made by Dr. Stanley M. Hunter and Dr. Dain L. Tasker. Dr. Clement A. Whiting, chairman of the faculty, made the address presenting the class for degrees, and Dr. John O. Hunt, president of the board of directors, conferred the degrees with appropriate remarks to the six members of the graduating class.

The recipients of the diplomas are all graduates of the three year (thirty months) course of study and will at once enter upon the practical and active work of their profession with locations as follows: Dr. Pearl A. Bliss will practice with her husband, Dr. Asa P. Bliss, in Los Angeles; Dr. Emma E. Donnelly will open an office in Los Angeles; Dr. Edwin P. Watkins will be found in Pasadena; Dr. Louise V. Wurts expects to locate in Ontario, Calif.; Dr. Gneva G. Paull has gone to San Diego, and Dr. Emilie R. Mode has selected Denver, Colo., as her future home. The class is said to be an unusually good one and their many friends prophesy a successful future for them.

Death of Dr. Sylvester W. Hart.

Again we are called upon to announce the death of a member of the Association; one who will be sadly missed, and especially by the profession in New York, where he rendered distinguished service in the cause of legislation. The following particulars of his illness and death and tribute to his memory are contributed by Dr. Chas. Hazzard, of New York city:

Dr. Sylvester Hart, of Albany, New York, died at his home on February 5, 1907, after a brief illness. He was confined to his bed for only about a week with the acute symptoms due to the final breakdown of chronic Bright's disease, from which for several years he had been a sufferer. For more than a year his urine, upon analysis, had shown 10 per cent. or more of albumen.

Dr. Hart was a well know osteopath, and had a thriving practice at Albany. He was one of the best known osteopaths in the state, and was last year the president of the State Osteopathic Association. His residence at Albany and his acquaintance with legislators made him very familiar with legislative work, and this knowledge he used in a very valuable way to osteopaths in the various campaigns for legislative recognition. He was an invaluable as well as an indefatigable worker in the osteopathis ranks, and the valiant fight he waged at Albany will be long remembered. Under his leadership the osteopathic bill first passed the senate.

In his death the osteopaths of New York lose a valued friend and warrior and the profession an able exponent.

In Memoriam—Dr. Sylvester Hart.

At a meeting of the Hudson River North Osteopathic Association, held the 2nd day of February, 1907, at the offices of Drs. Frink and Brown, at Troy, N. Y., a committee was appointed to prepare a testimonial to the memory of Dr. Sylvester W. Hart.

MEMORIAL.

With profound sorrow the members of the Hudson River North Osteopathic Association record the death of their beloved associate and charter member, Dr. Sylvester W. Hart, and bear witness to the irreparable loss this association and the profession at large have sustained.

In the death of Dr. Sylvester W. Hart this association is bereft of a life singularly strong in character and steadfast in purpose. He was ever courageous, sympathetic and possessed high ideals of life and of his profession. Dr. Hart's name and presence graced and honored the many positions of trust he was called upon to fill.

We, who have been so highly favored with his personal friendship and presence, recall

with pride and gratitude his earnest and devoted service, his tireless labors, his unselfish sacrifices, his matchless loyalty and deep interest in the promotion of the welfare of his profession.

This association extends to the bereaved wife its heartfelt sympathy and directs that this memorial be entered upon its minutes.

J. H. McDowell,
Elizabeth Frink,
Committee.

Resolutions.

Whereas, on February 2, 1907, we have sustained an irreparable loss in the death of our brother, Dr. Sylvester W. Hart, and,

Whereas, the profession has lost one of its ablest and best representatives, the City of Albany a skillful practitioner, his associates a loyal friend and co-worker; therefore be it

Resolved, That we, in this great affliction, share with the bereaved wife her sorrow, and hereby tender our heartfelt sympathy, and that copies of these resolutions be sent to the afflicted wife, to the local papers, to the osteopathic journals, and to the Osteopathic Society of New York.

Necrology Committee of A. O. A:
Bessie A. Duffield, Nashville, Tenn.
Alfred Byron King, St. Louis, Mo.
Willi L. Buster, Mt. Vernon, N. Y.

The Fight in New York.

We are indebted to Dr. Chas. Hazzard for the following account of the legislative situation in New York:

"Our fight waxes hot, and we must win or get out and fight in the courts for our rights. As regards our bill, it is now in the hands of the public health committees in the respective houses, and all the hearings have been held. We think the chances for passage of our bill are reasonably good this year. We feel sure of its passage, through the senate by a good majority, and things look good in the assembly, although we cannot tell until the vote is passed whether we will win. Three hearings have been held and all were quite favorable to our bill. Two of these hearings were upon the osteopathic bill. The last one, held February 21, was on the medical unity bill, which seeks to abolish the present arrangement of the separate medical examining boards, and substitute a single board therefor. As there is no provision in the bill to assure the different schools representation on this board, the homeopaths and eclectics are fighting it on the grounds that it will lose them their identity and will subject them to the allopaths, as occurred in Alabama. The osteopaths are fighting the bill for the very good reason that it aims to wipe them off the map. The bill is championed only by the allopaths, who are apparently seeking a monopoly. It is very doubtful whether this bill can even get out of committee. It was so vigorously attacked at the hearing that its true object was made apparent.

"A recent decision handed down by the appellate division of the supreme court makes such a broad definition of the practice of medicine that the osteopaths are sure of remaining in the state only by passing their bill. This decision was in a case, not of an osteopath, but of a "neuro-mechano-therapist." Naturally this state of affairs is making every osteopath work as never before, and puts squarely up to the legislature the question whether the osteopaths shall be exiled from the state. We are putting the decision to a good use in these ways, and it may prove a benefit if it forces the passage of our bill. The legislators seem inclined to think it would be a great injustice to oust the osteopaths, and the people are making themselves heard."

The osteopaths of Indianapolis recently formed a city society which will meet on the first Saturday evening of each month. Dr. M. E. Clark was elected president.

PERSONALS.

Dr. J. Martin Littlejohn is recovering from a severe illness.

Born, February 5, 1907, to Dr. and Mrs. Charles Hazzard, of New York, a son.

Born, February 5, 1907, to Dr. and Mrs. V. P. Urbain, of Hamilton, Ohio, a son.

Dr. A. G. Hildreth is taking a much needed rest. During his absence Dr. W. D. Dobson, of Kirksville, is in charge of the A. T. Still Infirmary in St. Louis.

Walter Elfrink, D. O., of Chicago, in response to an invitation from the Minnesota Health League, delivered a lecture on Vegetarianism at the First Baptist church in St. Paul on January 15. He took his audience by storm. Many declared it the best lecture they had ever heard.

Dr. Robert H. Goodale, formerly of Riverside, Calif., has accepted a position as surgeon for a large mining company at En Terrazas, Chihuahua, Mexico.

By invitation of Lieut.-Col. Glenn, commander of the Post, Dr. M. F. Hulett will deliver an address before the officers of the U. S. recruiting station at Columbus, Ohio. His subject will be, "A Knowledge of the Human System an Aid to the Maintenance of Health."

On March 15, Dr. T. D. Lockwood will succeed to the practice of Dr. Violetta S. Davis at 19 West Park street, Newark, N. J., where he will be on Mondays, Wednesdays and Fridays between the hours of 9 and 5. On other days he is at his office in Hotel Normandie, in New York city.

Ind. Dr. Clark will specialize along the lines of gynecology, obstetrics and diseases of S. E. Warner, and opened an office at 409-10 Board of Trade Building, Indianapolis, Ind. Dr. Clark will specialize along the lines of gynecology, obstetric and diseases of children. He will also do gynecological surgery.

Dr. T. J. Watson, late of Pueblo, Col., is in New York City pursuing special studies on diseases of the rectum. This work occupies the morning hours, in the afternoons and evenings he practices with Dr. G. E. Graham, with whom he has formed a partnership. Their offices are in the Hotel Woodward, Broadway and Fifty-fifth street.

Mrs. Willard, wife of Dr. W. D. Willard, of Norfolk, Va, recently suffered a very serious and painful accident. Her clothing took fire from an open grate in her room, and as she was alone at the time she came near burning to death before assistance reached her. Dr. Willard reports that she is now a little more comfortable and that hopes of her recovery are entertained.

Dr. Wm. Horace Ivie, who is taking a post graduate course at the American School of Osteopathy, has been suffering with la grippe and tonsillitis, but is improving. He writes that he was ill at the wrong time, as some of the seniors who had promised to make application for membership in the A. O. A. got away without doing so. However, the applications of twenty-two were secured, which makes thirty-one Dr. Ivie has succeeded thus far in getting this year. The A. O. A. needs a few more Ivies.

The *Kirksville* (Mo.) *Journal* in its issue for February 21, states that Dr. Harry M. Still, who for several years past has been associated with Dr. Charles Hazzard in the practice of osteopathy in New York city, has, on account of poor health, relinquished, temporarily at least, his professional work and returned to Kirksville. He has been elected to the presidency of the Citizens' National Bank at that place. The JOURNAL in speaking further of him says: "In addition to a highly remunerative practice, Dr. Still's investments have uniformly been successful, and today, although still a young man, he easily takes rank with our most solid business men in point of wealth."

REMOVALS.

Alson H. Gleason, State Mutual Bldg., to 765 Main Street, Worcester, Mass.
Margaret H. Allen, 716 A Union Street, to 70 Seventh Avenue, Brooklyn, N. Y.
B. P. Shepherd, Macleay Bldg., to 308-9 Swetland Bldg., Portland, Ore.
F. C. and Annie Stow Clak, 203 Mason Bldg., to 530 Auditorium Bldg., Los Angeles, Calif.
Arthur Kew, Jamaica, N. Y., to 1431 Magnolia Avenue, Jersey City, New Jersey.
T. J. Watson, Pueblo, Colo., to Hotel Woodward, Broadway and Fifty-fifth Street, New York City.
G. E. Graham, 1851, Seventh Avenue, to Hotel Woodward, Broadway and Fifty-fifth Street, New York City.
A. S. Loving, 936 Main Street, to 12-14 Morrison Block, Jacksonville, Ill.
T. Simpson McCall, 32 to 20-21 The Spurling, Elgin, Ill.
C. E. McCormick, Watsonville, to 402 Pearl Street, Napa, Calif.
George W. Perrin, Steele Bldg., to 524-5 Empire Bldg., Denver, Colo.
J. Porter McCormick, 150 Highland Avenue, to 506-7 Savings and Trust Bldg., Newcastle, Pa.
Franklin Fiske, Portage, Wis., to Kirksville, Mo.
Clara Macfarlane, 777 Johnson Street, to 308-9 Swetland Bldg., Portland, Oregon.
Florence Coffland, Circleville, to Piqua, Ohio.
Alexander F. McWilliams' address is 421-2-3 Huntington Chambers, Boston, Mass.
M. E. Clark, Kirksville, Mo., to 409 Board of Trade Bldg., Indianapolis, Ind.
J. B. and Mrs. J. B. Littlejohn, Seventh-sixth Street and Saginaw Avenue, to 535 W. Monroe Street, Chicago, Ill.
Robert H. Goodale, Riverside Calif., to En Terrazas, F. C. C. M., Chihuahua, Mexico.
Elvina Mekemson Monmouth, to Biggsville, Ill.